## Protecting Local Government Retirement and Benefits Act Corrective Action Plan:

### **Defined Benefit Pension Retirement Systems**

Issued under authority of Public Act 202 of 2017.

I. MUNICIPALITY INFORMATION						
Local Unit Name: <u>Traverse City Light and Power</u>	Six-Digit Muni Code: 287516					
Defined Benefit Pension System Name: Traverse City Light and Power MERS Defined Benefit Plan						
Contact Name (Administrative Officer): Tim Arends						
Title if not Administrative Officer: Executive Director						
Email: tarends@tclp.org	Telephone Number: (231) 932-4558					

#### 2. GENERAL INFORMATION

Corrective Action Plan: An underfunded local unit of government shall develop and submit for approval a corrective action plan for the local unit of government. The local unit of government shall determine the components of the corrective action plan. This Corrective Action Plan shall be submitted by any local unit of government with at least one defined benefit pension retirement system that has been determined to have an underfunded status. Underfunded status for a defined benefit pension system is defined as being less than 60% funded according to the most recent audited financial statements, and, if the local unit of government is a city, village, township, or county, the annually required contribution for all of the defined benefit pension retirement systems of the local unit of government is greater than 10% of the local unit of government's annual governmental fund revenues, based on the most recent fiscal year.

**Due Date**: The local unit of government has **180 days from the date of notification** to submit a corrective action plan to the Municipal Stability Board (the Board). The Board may extend the 180-day deadline by up to an additional 45 days if the local unit of government submits a reasonable draft of a corrective action plan and requests an extension.

Filing: Per Sec. 10(1) of PA 202 of 2017 (the Act), this Corrective Action Plan must be approved by the local government's administrative officer and its governing body. You must provide proof of your governing body approving this Corrective Action Plan and attach the documentation as a separate PDF document. Per Sec. 10(4) of the Act, failure to provide documentation that demonstrates approval from your governing body will result in a determination of noncompliance by the Board.

The completed plan must be submitted via email to Treasury at LocalRetirementReporting@michigan.gov for review by the Board. If you have multiple underfunded retirement systems, you are required to complete separate plans and send a separate email for each underfunded system. Please attach each plan as a separate PDF document in addition to all applicable supporting documentation.

The subject line of the email(s) should be in the following format: **Corrective Action Plan-2017, Local Unit Name, Retirement System Name** (e.g. Corrective Action Plan-2017, City of Lansing, Employees' Retirement System Pension Plan). Treasury will send an automatic reply acknowledging receipt of the email. Your individual email settings must allow for receipt of Treasury's automatic reply. This will be the only notification confirming receipt of the application(s).

**Municipal Stability Board:** The Municipal Stability Board shall review and vote on the approval of a corrective action plan submitted by a local unit of government. If corrective action is approved, the Board will monitor the corrective action for the following two years, and the Board will report on the local unit of government's compliance with the Act not less than every two years.

**Review Process:** Following receipt of the email by Treasury, the Board will accept the corrective action plan submission at the next scheduled meeting of the Board. The Board shall then approve or reject the corrective action plan within 45 days from the date of the meeting.

Considerations for Approval: A successful corrective action plan will demonstrate the actions for correcting underfunded status as set forth in Sec. 10(7) of the Act (listed below), as well as any additional solutions to address the underfunded status. Please also include steps already taken to address your underfunded status as well as the date prospective actions will be taken. A local unit of government may also include in its corrective action plan, a review of the local unit of government's budget and finances to determine any alternative methods available to address its underfunded status. A corrective action plan under this section may include the development and implementation of corrective options for the local unit of government to address its underfunded status. The corrective options as described in Sec. 10(7) may include, but are not limited to, any of the following:

- (i) Closing the current defined benefit plan.
- (ii) Implementing a multiplier limit.
- (iii) Reducing or eliminating new accrued benefits.
- (iv) Implementing final average compensation standards.

Implementation: The local unit of government has up to 180 days after the approval of a corrective action plan to begin to implement the corrective action plan to address its underfunded status. The Board shall monitor each underfunded local unit of government's compliance with this act and any corrective action plan. The Board shall adopt a schedule, not less than every 2 years, to certify that the underfunded local unit of government is in substantial compliance with the act. If the Board determines that an underfunded local unit of government is not in substantial compliance under this subsection, the Board shall within 15 days provide notification and report to the local unit of government detailing the reasons for the determination of noncompliance with the corrective action plan. The local unit of government has 60 days from the date of the notification to address the determination of noncompliance.

#### 3. DESCRIPTIONS OF PRIOR ACTIONS

Prior actions are separated into three categories below: System Design Changes, Additional Funding, and Other Considerations. Please provide a brief description of the prior actions implemented by the local government to address the retirement system's underfunded status within the appropriate category section. Within each category are sample statements that you may choose to use to indicate the changes to your system that will positively affect your funded status. For retirement systems that have multiple divisions, departments, or plans within the same retirement system, please indicate how these changes impact the retirement **system** as a whole.

Please Note: If applicable, prior actions listed within your waiver application(s) may also be included in your corrective action plan.

Please indicate where in the attached supporting documentation these changes are described and the impact of those changes (i.e. what has the local unit of government done to improve its underfunded status, and where can we find the proof of these changes in the supporting documentation?).

**Note:** Please provide the name of the system impacted, the date you made the change, the relevant page number(s) within the supporting documentation, and the resulting change to the system's funded ratio.

#### **Category of Prior Actions:**

System Design Changes - System design changes may include the following: Lower tier of benefits for new hires, final average compensation limitations, freeze future benefit accruals for active employees in the defined benefit system, defined contribution system for new hires, hybrid system for new hires, bridged multiplier for active employees, etc.

**Sample Statement**: The system's multiplier for current employees was lowered from 2.5X to 2X for the **General Employees' Retirement System** on **January 1, 2017**. On page 8 of the attached actuarial supplemental valuation, it shows our funded ratio will be 60% by fiscal year 2020.

The system's multiplier for new hire union employees was lowered from 2.25% to 1.5% based on base wage only. This was implemented for union employees hired after 7/1/2012. The system's multiplier for new hire non-union employees was lowered from 2.25% to 1.5% based on base wage only. This was implemented for new hire non-union employees hired after 7/1/2017. See Attachment 6a.

Additional Funding – Additional funding may include the following: Voluntary contributions above the actuarially determined contribution, bonding, millage increases, restricted funds, etc.

**Sample Statement:** The local unit provided a lump sum payment of \$1 million to the General Employees' Retirement System on January 1, 2017. This lump sum payment was in addition to the actuarially determined contribution (ADC) of the system. The additional contribution will increase the retirement system's funded ratio to 61% by 2025. Please see page 10 of the attached enacted budget, which highlights this contribution of \$1 million.

On an annual basis during budget, staff reviews continuing on a ten year accelerated payment schedule (reduced each year) based on market value. The accelerated funding was first adopted for the fiscal year ending June 30, 2017 and the board has committed the accelerated funding through June 30, 2019. Each year the additional contributions are evaluated during the budget process. The accelerated funding will lead to an approximate additional cumulative \$3,000,000 in contributions to the pension fund. See Attachment 4a.

☑ Other Considerations – Other considerations may include the following: outdated Form 5572 information, actuarial assumption changes, amortization policy changes, etc.

**Sample Statement:** The information provided on the Form 5572 from the audit used actuarial data from **2015**. Attached is an updated actuarial valuation for **2017** that shows our funded ratio has improved to **62%** as indicated on page **13**.

Attached is an updated actuarial valuation for 2017 that shows our funded ratio has improved to 61% as indicated on page 5 of Attachment 2a.

#### 4. DESCRIPTION OF PROSPECTIVE ACTIONS

The corrective action plan allows you to submit a plan of prospective actions which are separated into three categories below: System Design Changes, Additional Funding, and Other Considerations. Please provide a brief description of the additional actions the local government is planning to implement to address the retirement system's underfunded status within the appropriate category section. Within each category are sample statements that you may choose to use to indicate the changes to your system that will positively affect your funded status. For retirement systems that have multiple divisions, departments, or plans within the same retirement system, please indicate how these changes impact the retirement **system** as a whole.

Please indicate where in the attached supporting documentation these changes are described and the impact of those changes (i.e. what will the local unit of government do to improve its underfunded status, and where can we find the proof of these changes in the supporting documentation?).

Category of Prospective Actions:
System Design Changes - System design changes may include the following: Lower tier of benefits for new hires, final average compensation limitations, freeze future benefit accruals for active employees in the defined benefit system, defined contribution system for new hires, hybrid system for new hires, bridged multiplier for active employees, etc.
<b>Sample Statement</b> : Beginning with <b>summer 2018</b> contract negotiations, the local unit will seek to lower the system's multiplier for current employees from 2.5X to 2X for the <b>General Employees' Retirement System</b> . On page <b>8</b> of the attached actuarial supplemental valuation, it shows our funded ratio would be <b>60%</b> funded by <b>fiscal year 2020</b> if these changes were adopted and implemented by <b>fiscal year 2019</b> .
Additional Funding – Additional funding may include the following: voluntary contributions above the actuarially determined contribution, bonding, millage increases, restricted funds, etc.
<b>Sample Statement:</b> Beginning in <b>fiscal year 2019,</b> the local unit will provide a lump sum payment of \$1 million to the <b>General Employees' Retirement System</b> . This lump sum payment will be in addition to the actuarially determined contribution (ADC) of the system. The additional contribution will increase the retirement system's funded ratio to <b>61% by 2025</b> . Please see page <b>10</b> of the attached enacted budget, which highlights this contribution of \$1 million. Please see page <b>12</b> of the attached supplemental actuarial valuation showing the projected change to the system's funded ratio with this additional contribution.
The board through the budget process approved continuing the ten year accelerated funding schedule for another fiscal year (currently on year 8). See attachment 5a.
☑ Other Considerations – Other considerations may include the following: outdated Form 5572 information, actuarial assumption changes, amortization policy changes, etc.
<b>Sample Statement:</b> Beginning in <b>fiscal year 2019</b> , the local unit will begin amortizing the unfunded portion of the pension liability using a <b>level-dollar amortization method over a closed period of 10 years</b> . This will allow the retirement system to reach a funded status of <b>62%</b> by <b>2022</b> as shown in the attached actuarial analysis on page <b>13</b> .
Current actuarial report provides projection scenarios of funding levels increasing over the current funding ratio of 61% by reflecting the ten year accelerated payment schedule. See page 12 of Attachment 2A. Public Act 202 of 2017 requires oversight of an entity when the ARC exceeds 10% of the government's annual general fund operating revenue. TCLP is a non primary government currently at 2.7% of operating revenues, significantly under the 10%.
5. CONFIRMATION OF FUNDING
Please check the applicable answer:
Do the corrective actions listed in this plan allow for (insert local unit name) Traverse City Light and Power to make, at a minimum, the annual required contribution payment for the defined benefit pension system according to your long-term budget forecast?
<ul> <li>Yes</li> <li>No</li> <li>If No, Explain:</li> </ul>

6. DOCUMENTATION ATTACH	ED TO THIS CORRECTIVE ACTION PLAN
Documentation should be attached as a . corrective action plan that would be imp	pdf to this Corrective Action Plan. The documentation should detail the lemented to adequately address the local unit of government's underfunded re included as part of this plan and attach in successive order as provided
than one document in a specific category	locuments please use the naming convention shown below. If there is more that needs to be submitted, include a, b, or c for each document. For emental valuations, you would name the first document "Attachment 2a" and
Naming Convention	Type of Document
★ Attachment – I	This Corrective Action Plan Form (Required)
★ Attachment – Ia	Documentation from the governing body approving thi Corrective Action Plan (Required)
★ Attachment – 2a	Actuarial Analysis (annual valuation, supplemental valuation, projection)
Attachment – 3a	Internally Developed Projection Study
★ Attachment – 4a	Documentation of additional payments in past years that is not reflected in your audited financial statements (e.g. enacted budget system provided information)

#### TRAVERSE CITY LIGHT AND POWER BOARD

Minutes of Regular Meeting Held at 5:15 p.m., Commission Chambers, Governmental Center Tuesday, August 14, 2018

#### **Board Members -**

Present: Pat McGuire, Elysha Davila, Ross Hammersley, Amy Shamroe, Tim

Werner, John Taylor

Absent: Paul Heiberger

#### Ex Officio Member -

Present: Marty Colburn, City Manager

Others: Tim Arends, Daren Dixon, Scott Menhart, Karla Myers-Beman, Kelli

Schroeder, Tony Chartrand, Jacob Hardy, Mark Watson, Jennifer J. St.

Amour

The meeting was called to order at 5:15 p.m. by Chairman McGuire.

#### Item 2 on the Agenda being Disclosure of Recusal - None

Chairman McGuire made a motion to add item f. to the Consent Calendar, approving a purchase order for transformers from ABB. Seconded by Hammersley.

CARRIED unanimously.

#### Item 3 on the Agenda being Consent Calendar

Moved by Shamore, seconded by Hammersley, that the following actions, as recommended on the Consent Calendar portion of the Agenda, be approved:

- a. Approval of Agenda
- b. Minutes of the Regular Meeting of July 10, 2018.
- c. Approving the corrective action plan submission regarding Traverse City Light & Power's pension system to the State of Michigan Department of Treasury.
- d. Authorizing a Letter of Agreement with the Utility Workers Union of America, AFL-CIO Local No. 295.
- e. Approving a partial material purchase for the Parsons Switching Station project.
- f. Consideration of approving a purchase order for eight potential transformers to be used for the Parsons Switching Project.

CARRIED unanimously.

#### **Items Removed from the Consent Calendar**

None.

#### Item 4 on the Agenda being Unfinished Business

a. Consideration of approving the 2018 Strategic Plan.

The following individuals addressed the Board:

Tim Arends, Executive Director
Karla Myers-Beman, Controller
Daren Dixon, Operations Manager
Scott Menhart, Mgr. of Telecom & Technology
Kelli Schroeder, Mgr. of Human Resources & Communications
Jacob Hardy, Key Accounts/Energy Technician

The following individuals from the Public addressed the Board:

Elizabeth Dell, 117 E. 10<sup>th</sup> St., ratepayer
Kate Madigan, 400 Boughey St., ratepayer
Mayor James Carruthers, 218 W. Eleventh St., ratepayer
Woody Smith, 502 Fifth St., ratepayer
Ann Rogers, 1236 Peninsula Dr., ratepayer
Greg Reisig, NMEAC, non-ratepayer
Dave Petrov, 9988 Riley Rd., non-ratepayer
Dr. Lisa Del Buono, 1800 Nelson Rd., non-ratepayer
Suzannah Tobin, 502 Fifth St., ratepayer
Maureen Voss, 727 Washington St., ratepayer
Jeff Gibbs, Benzie County, non-ratepayer
Russell Schindler, 1123 Front St., ratepayer
Bob Eichenlaub, 531 Randolph St., ratepayer
Ric Evans, Groundwork Center for Resilient Communities

Moved by Shamroe, seconded by Hammersley, that the Board adopt the Traverse City Light & Power Strategic Plan – 2018 as amended.

YES – Taylor, Davila, Hammersley, Werner, Shamroe NO – McGuire

#### CARRIED.

#### Item 5 on the Agenda being New Business

g. Consumers Energy 46kV Rebuild.

The following individuals addressed the Board:

Daren Dixon, Operations Manager Tim Arends, Executive Director

Moved by Shamroe, seconded by Werner, that the Board authorizes the Chairman and Secretary to enter into an hourly Construction Agreement with CC Power, LLC in an

amount \$83,700, more or less, to rebuild & relocate overhead lines in the right-of-way east of Peninsula Dr. between Eastern Ave. and North Orchard Dr. subject to approval as to substance by the Executive Director and as to form by General Counsel.

The following individuals addressed the Board:

Tom Lemay, 711 Calvin Dr., ratepayer

CARRIED unanimously.

## Item 6 on the Agenda being Reports and Communications

- a. From Legal Counsel.
- b. From Staff.
  - 1. MPPA Update.

The following individuals addressed the Board:

Tim Arends, Executive Director

2. Discussion of potential renewable energy project on TCL&P owned property on Cedar Run Rd.

The following individuals addressed the Board:

Tim Arends, Executive Director Mark Watson, Field Engineer

3. Capital Plan Update.

The following individuals addressed the Board:

Tim Arends, Executive Director Karla Myers-Beman, Controller

c. From Board

## Item 7 on the Agenda being Public Comment

a. General

The following individuals from the Public addressed the Board:

Ann Rogers, 1236 Peninsula Dr., ratepayer Dave Petrov, 9988 Riley Rd., non-ratepayer

There being no objection, Chairman McGuire declared the meeting adjourned at 6:46 p.m.

Tim Arenus, Secretar,



### MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM OF MICHIGAN

ANNUAL ACTUARIAL VALUATION REPORT DECEMBER 31, 2017 TRAVERSE CITY LIGHT & POWER (2811)



Spring, 2018

Traverse City Light & Power

In care of: Municipal Employees' Retirement System of Michigan 1134 Municipal Way Lansing, Michigan 48917

This report presents the results of the Annual Actuarial Valuation, prepared as of December 31, 2017. The report includes the determination of liabilities and contribution rates resulting from the participation of Traverse City Light & Power (2811) in the Municipal Employees' Retirement System of Michigan ("MERS"). MERS is an independent, professional retirement services company that was created to administer retirement plans for Michigan municipalities on a not-for-profit basis. This report contains the minimum actuarially determined contribution requirement, in alignment with the MERS Plan Documents, funding policy and Michigan Constitution. Traverse City Light & Power is responsible for the employer contributions needed to provide MERS benefits for its employees and former employees under the Michigan Constitution and the MERS Plan Document.

The purpose of the December 31, 2017 annual actuarial valuation is to:

- Measure funding progress
- Establish contribution requirements for the fiscal year beginning July 1, 2019
- Provide actuarial information in connection with applicable Governmental Accounting Standards Board (GASB) statements

This valuation report should not be relied upon for any other purpose. Reliance on information contained in this report by anyone for anything other than the intended purpose could be misleading.

The valuation uses financial data, plan provision data, and participant data as of December 31, 2017 furnished by MERS. In accordance with Actuarial Standards of Practice No. 23, the data was checked for internal and year to year consistency as well as general reasonableness, but was not otherwise audited. CBIZ Retirement Plan Services does not assume responsibility for the accuracy or completeness of the data used in this valuation.

The actuarial assumptions and methods are adopted by the MERS Retirement Board, and are reviewed every five years in an Experience Study. The most recent study was completed in 2015. Please refer to the division-specific assumptions described in table(s) in this report, and to the Appendix on the MERS website at:

www.mersofmich.com/Portals/0/Assets/Resources/AAV-Appendix/MERS-2017AnnualActuarialValuation-Appendix.pdf.



The actuarial assumptions used for this valuation produce results that we believe are reasonable.

To the best of our knowledge, this report is complete and accurate, was prepared in conformity with generally recognized actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and is in compliance with Act No. 220 of the Public Acts of 1996, as amended, and the MERS Plan Document as revised. All of the undersigned are members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The Retirement Board of the Municipal Employees' Retirement System of Michigan confirms that the System provides for payment of the required employer contribution as described in Section 20m of Act No. 314 of 1965 (MCL 38.1140m).

This information is purely actuarial in nature. It is not intended to serve as a substitute for legal, accounting or investment advice.

This report was prepared at the request of the Retirement Board and may be provided only in its entirety by the municipality to other interested parties (MERS customarily provides the full report on request to associated third parties such as the auditor for the municipality). CBIZ Retirement Plan Services is not responsible for the consequences of any unauthorized use.

You should notify MERS if you disagree with anything contained in the report or are aware of any information that would affect the results of the report that have not been communicated to us. If you have reason to believe that the plan provisions are incorrectly described, that important plan provisions relevant to this valuation are not described, that conditions have changed since the calculations were made, that the information provided in this report is inaccurate or is in anyway incomplete, or if you need further information in order to make an informed decision on the subject matter in this report, please contact your Regional Manager at 1.800.767.MERS (6377).

Sincerely,

Cathy Nagy, MAAA, FSA Jim Koss, MAAA, ASA Curtis Powell, MAAA, EA

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## **Executive Summary**

#### **Funded Ratio and Required Employer Contributions**

The MERS Defined Benefit Plan is an agent multiple-employer plan, meaning that assets are pooled for investment purposes but separate accounts are maintained for each individual employer. Each municipality is responsible for their own plan liabilities; MERS does not borrow from one municipality's account to pay for another.

The funded ratio of a plan is the percentage of the dollar value of the accrued benefits that is covered by the actuarial value of assets.

#### Your Funded Ratio:

	12/31/2017 *	12/31/2016
Funded Ratio	61%	59%

<sup>\*</sup> Reflects assets from Surplus divisions, if any.

Michigan Law requires that pension plans be pre-funded, meaning money is set aside now to pay for future benefits. Pension plans are usually funded by employer and employee contributions, and investment income.

How quickly a plan attains the 100% funding goal depends on many factors such as:

- The current funded ratio
- The future experience of the plan
- The amortization period

It is more important to look at the trend in the funded ratio over a period of time than at a particular point in time.

## **Your Required Employer Contributions:**

Your computed employer contributions are shown in the following table. Employee contributions, if any, are in addition to the computed employer contributions. Changes to the assumptions and methods based on the 2015 Experience Study were first reflected in the December 31, 2015 valuations. The impact of these changes is being phased-in over a 5 year period. The phase-in allows the employer to spread the impact of the new assumptions over 5 fiscal years. This valuation reflects the third year of the phase-in.

Your minimum required contribution is the amount in the "Phase-in" columns. By default, MERS will invoice you the phased-in contribution amount, but strongly encourages you to contribute more than the minimum required contribution. If for 2018 your municipality is making employer contributions based on rates without the phase-in applied, contact MERS to ensure the No Phase-in rate is used again for 2019 and not the defaulted phase-in rates.

	Percentage of Payroll				Monthly \$ Based on Projected Payroll							
		No		No	_			No				No
	Phase-in	Phase-in	Phase-in	Phase-in	Р	hase-in	P	hase-in	P	hase-in	Р	hase-in
Valuation Date:	12/31/2017	12/31/2017	12/31/2016	12/31/2016	12	/31/2017	12	2/31/2017	12	/31/2016	12	/31/2016
	July 1,	July 1,	July 1,	July 1,		July 1,		July 1,		July 1,	,	July 1,
Fiscal Year Beginning:	2019	2019	2018	2018		2019		2019		2018		2018
Division												
01 - Non-Union	-	-	28.09%	30.16%	\$	44,373	\$	45,605	\$	25,054	\$	26,902
10 - Union	-	-	-	-		142,008		145,756		64,833		70,455
11 - Non-Un on/aftr 7/1/201	9.16%	9.16%				2,299		2,299	ĺ			i
12 - Union hired after 7/1/	6.91%	6.91%	7.37%	7.37%		3,245		3,245		2,886		2,886
Municipality Total					\$	191,925	\$	196,905	\$	92,773	\$	100,243

Employee contribution rates reflected in the valuations are shown below:

	Employee Cor	ntribution Rate
Valuation Date:	12/31/2017	12/31/2016
Division		
01 - Non-Union	0.00%	0.00%
10 - Union	0.00%	0.00%
11 - Non-Un on/aftr 7/1/201	0.00%	0.00%
12 - Union hired after 7/1/	0.00%	0.00%

The employer may contribute more than the minimum required contributions, as these additional contributions will earn investment income and may result in lower future contribution requirements. Employers making contributions in excess of the minimum requirements may elect to apply the excess contribution immediately to a particular division, or segregate the excess into one or more of what MERS calls "Surplus" divisions. An election in the first case would immediately reduce any unfunded accrued liability and lower the amortization payments throughout the remaining amortization period. An

election to set up Surplus divisions would not immediately lower future contributions, however the assets from the Surplus divisions could be transferred to an unfunded division in the future to reduce the unfunded liability in future years, or to be used to pay all or a portion of the minimum required contribution in a future year. For purposes of this report, the assets in any Surplus division have been included in the municipality's total assets, unfunded accrued liability and funded status, however, these assets are not used in calculating the minimum required contribution.

## MERS strongly encourages employers to contribute more than the minimum contribution shown above.

If you are interested in making additional contributions, please contact MERS and they can assist you with evaluating your options.

#### **How and Why Do These Numbers Change?**

In a defined benefit plan, contributions vary from one annual actuarial valuation to the next as a result of the following:

- Changes in benefit provisions (see Table 2)
- Changes in actuarial assumptions and methods (see the Appendix)
- Experience of the plan (investment experience and demographic experience); this is the difference between actual experience of the plan and the actuarial assumptions. For example:
  - o Lower actual investment returns would result in higher required employer contributions, and vice-versa.
  - o Smaller than assumed pay increases would lower required employer contributions.
  - Reductions in the number of active employees would lower required contribution dollars, but would usually increase the contribution rate expressed as a percentage of (the now lower) payroll.
  - o Retirements at earlier ages than assumed would usually increase required employer contributions.
  - o More non-vested terminations of employment than assumed would decrease required contributions.
  - o More disabilities or survivor (death) benefits than assumed would increase required contributions.
  - o Longer lifetimes after retirement than assumed would increase required employer contributions.

Actuarial valuations do not affect the ultimate cost of the plan; the benefit payments (current and future) determine the cost of the plan. Actuarial valuations only affect the timing of the contributions into the plan. Because assumptions are for the long term, plan experience will not match the actuarial assumptions in any given year (except by coincidence). Each annual actuarial valuation will adjust the required employer contributions up or down based on the prior year's actual experience.

## **Comments on Investment Return Assumption and Asset Smoothing**

A defined benefit plan is funded by employer contributions, participant contributions, and investment earnings. Investment earnings have historically provided **more than half** of the funding. The larger the share of benefits being provided from investment returns, the smaller the required contributions, and vice versa. Determining the contributions required to prefund the promised retirement benefits requires an assumption of what investment earnings are expected to add to the fund over a long period of time. This is called the **Investment Return Assumption**.

The MERS Investment Return Assumption is **7.75%** per year. This, along with all of our other actuarial assumptions, is reviewed every five years in an Experience Study that compares the assumptions used against actual experience and recommends adjustments if necessary. If your municipality would like to explore contributions at lower investment return assumptions, please review the budget projection scenarios later in this report.

To avoid dramatic spikes and dips in annual contribution requirements due to short term fluctuations in asset markets, MERS applies a technique called **asset smoothing**. This spreads out each year's investment gains or losses over the prior year and the following four years. This smoothing method is used to determine your actuarial value of assets (valuation assets), which is then used to determine both your funded ratio and your required contributions. The (smoothed) **actuarial rate of return for 2017 was 6.08%, while the actual market rate of return was 13.07%**. To see historical details of the market rate of return, compared to the smoothed actuarial rate of return, refer to this report's <u>Appendix</u>, or visit our <u>Defined Benefit resource page</u> on the MERS website.

As of December 31, 2017 the actuarial value of assets is 101% of market value due to asset smoothing. This means that meeting the actuarial assumption in the next few years will require average annual market returns that exceed the 7.75% investment return assumption, or contribution requirements will continue to increase.

If the December 31, 2017 valuation results were based on market value instead of the actuarial value:

- The funded percent of your entire municipality would be 61% (instead of 61%); and
- Your total employer contribution requirement for the fiscal year starting July 1, 2019 would be \$2,392,260 (instead of \$2,362,860).

#### Risk Characteristics of Defined Benefit Plans

It is important to understand that Defined Benefit retirement plans, the plan sponsor, and the plan participants are exposed to certain risks. While risks cannot be eliminated entirely, they can be managed through various strategies. Below are a few examples of risk (this is not an all-inclusive list):

- Economic investment return, wage inflation, etc.
- Demographic longevity, disability, retirement, etc.
- Plan Sponsor and Employees contribution volatility, attract/retain employees, etc.

The MERS Retirement Board adopts certain assumptions and methods to manage the economic and demographic risks, and the contribution volatility risks. For example, the investment risk is the largest economic risk and is managed by having a balanced portfolio and a clearly defined investment strategy. Demographic risks are managed by preparing special studies called experience studies on a regular basis to determine if the assumptions used are reasonable compared to the experience. An Experience Study is completed every five years to review the assumptions and methods. The next Experience Study will be completed in 2020.

Risk can also be managed through a plan design that provides benefits that are sustainable in the long run.

The Actuarial Standards Board has issued Actuarial Standards of Practice (ASOP) No. 51. This standard will be effective for any actuarial work with a measurement date on or after November 1, 2018. This means, the December 31, 2018 and later annual actuarial valuation reports for MERS will have to comply with this standard. This standard will require the actuary to identify risks that, in the actuary's professional judgment may significantly impact the plan's future financial condition. The actuary will have to assess the potential effects of the identified risks on the plan's future financial condition. The assessment may or may not be based on numerical calculations. However, the assessment should reflect the specifics of the plan (i.e. funded status, plan demographics, funding policy, etc.). If the actuary concludes that numerical calculations are necessary to assess the risk, the actuary can use various methods to quantify the risk such as scenario tests, sensitivity tests, stress tests, etc.

Some of these risk assessment measures have already been incorporated in the MERS annual valuation reports. For example, the projections of funded percentage and employer contributions shown on the following pages could be used to gauge the risk associated with long term investment rates of return different than the assumed 7.75% annual rate. A history of the municipality's funded percentage as shown in Table 7, could indicate the trend in funded status over time.

## Alternate Scenarios to Estimate the Potential Volatility of Results ("What If Scenarios")

The calculations in this report are based on assumptions about long-term economic and demographic behavior. These assumptions will never materialize in a given year, except by coincidence. Therefore

the results will vary from one year to the next. The volatility of the results depends upon the characteristics of the plan. For example:

- Open divisions that have substantial assets compared to their active employee payroll will have more volatile employer contribution rates due to investment return fluctuations.
- Open divisions that have substantial accrued liability compared to their active employee payroll will have more volatile employer contribution rates due to demographic experience fluctuations.
- Small divisions will have more volatile contribution patterns than larger divisions because statistical fluctuations are relatively larger among small populations.
- Shorter amortization periods result in more volatile contribution patterns.

The analysis in this section is intended to review the potential volatility of the actuarial valuation results. It is important to note that calculations in this report are mathematical estimates based upon assumptions regarding future events, which may or may not materialize. Actuarial calculations can and do vary from one valuation to the next, sometimes significantly depending on the group's size.

Many assumptions are important in determining the required employer contributions. In the table below, we show the impact of varying the Investment Return Assumption. Lower investment returns would result in higher required employer contributions, and vice-versa.

The relative impact of each investment return scenario below will vary from year to year, as the participant demographics change. The impact of each scenario should be analyzed for a given year, not from year to year. The results in the table are based on the December 31, 2017 valuation, and are for the municipality in total, not by division. These results do not reflect a 5-year phase in of the impact of the new actuarial assumptions.

	Assumed Future Annual Smoothed Investment Return Assumption							
		Lower Future Annual Returns				Valuation ssumption	Higher Returns	
12/31/2017 Valuation Results		5.75%		6.75%		7.75%		8.75%
Accrued Liability	\$	39,057,621	\$	34,830,365	\$	31,292,642	\$	28,308,532
Valuation Assets <sup>1</sup>	\$	19,201,470	\$	19,201,470	\$	19,201,470	\$	19,201,470
Unfunded Accrued Liability	\$	19,856,151	\$	15,628,895	\$	12,091,172	\$	9,107,062
Funded Ratio		49%		55%		61%		68%
Monthly Normal Cost	\$	49,292	<b> </b>   \$	37,851	\$	29,259	\$	22,731
Monthly Amortization Payment	\$	257,052	\$	209,012	\$	167,646	\$	129,684
Total Employer Contribution <sup>2</sup>	\$	306,344	\$	246,863	\$	196,905	\$	152,415

<sup>&</sup>lt;sup>1</sup> The Valuation Assets include assets from Surplus divisions, if any.

<sup>&</sup>lt;sup>2</sup> If assets exceed accrued liabilities for a division, the division's amortization payment is negative and is used to reduce the division's employer contribution requirement. If the overfunding credit is larger than the normal cost, the division's full credit is included in the municipality's amortization payment above but the division's total contribution requirement is zero. This can cause the displayed normal cost and amortization payment to not add up to the displayed total employer contribution.

#### **Projection Scenarios**

The next two pages show projections of the plan's funded ratio and computed employer contributions under the actuarial assumptions used in the valuation and alternate assumed long-term investment return assumption scenarios. All four projections take into account the past investment losses that will continue to affect the actuarial rate of return in the short term. Under the 7.75% scenarios in the table on the next page, two sets of projections are shown:

- Based on the phase-in over 5 fiscal years (beginning in 2017) of the increased contribution requirements associated with the new actuarial assumptions. This projects your minimum required contribution.
- Based on no phase-in of the increased contribution requirements.

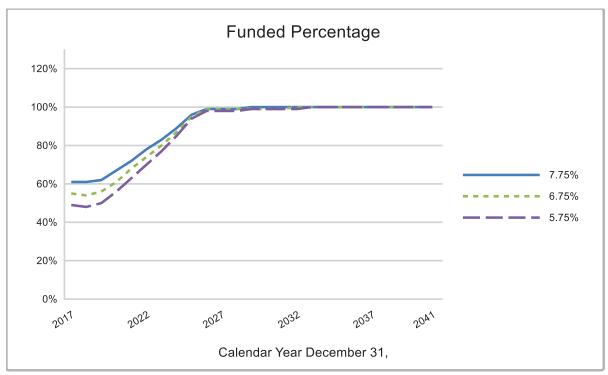
The 7.75% scenarios provide an estimate of computed employer contributions based on current actuarial assumptions, and a projected 7.75% market return. The other two scenarios may be useful if the municipality chooses to budget more conservatively, and make contributions in addition to the minimum requirements. The 6.75% and 5.75% projections provide an indication of the potential required employer contribution if MERS were to realize annual investment returns of 6.75% and 5.75% over the long-term.

The projections are shown both in tabular and graphical form in total for the employer. The tables show projections for six years. The graphs show projections for twenty five years.

Valuation	Fiscal Year						Comp	uted Annual
Year Ending	Beginning	Actuar	ial Accrued			Funded		nployer
12/31	7/1		iability	Valua	tion Assets <sup>2</sup>	Percentage		ntribution
7.75% <sup>1</sup>								
WITH 5-Y	EAR PHASE-	İN						
2017	2019	\$	31,292,642	\$	19,201,470	61%	\$	2,303,100
2018	2020		32,000,000		19,500,000	61%		2,460,000
2019	2021		32,600,000		20,200,000	62%		2,610,000
2020	2022		33,200,000		22,200,000	67%		2,680,000
2021	2023		33,800,000		24,400,000	72%		2,750,000
2022	2024		34,300,000		26,600,000	77%		2,850,000
NO 5 VE	AR PHASE-IN							
2017	2019	\$	31,292,642	\$	19,201,470	61%	\$	2,362,860
2017	2019		32,000,000	Ψ	19,500,000	61%	Ψ	2,302,800
2010	2020		32,600,000		20,300,000	62%		2,400,000
2019	2021		33,200,000		22,300,000	67%		2,670,000
2020	2022		33,800,000		24,500,000	72%		2,740,000
2022	2024		34,300,000		26,700,000	78%		2,840,000
	202.				20,100,000	1070		2,010,000
6.75% <sup>1</sup>								
	AR PHASE-IN							
2017	2019	\$	34,830,365	\$	19,201,470	55%	\$	2,962,356
2018	2020		35,600,000	· .	19,300,000	54%		3,130,000
2019	2021		36,200,000		20,200,000	56%		3,280,000
2020	2022		36,900,000		22,600,000	61%		3,370,000
2021	2023		37,500,000		25,300,000	68%		3,470,000
2022	2024		38,100,000		28,000,000	74%		3,590,000
5.75% <sup>1</sup>								
	AR PHASE-IN							
2017	2019		39,057,621	\$	19,201,470	49%	\$	3,676,128
2018	2020		39,800,000		19,200,000	48%		3,890,000
2019	2021		40,500,000		20,200,000	50%		4,060,000
2020	2022		41,200,000		23,200,000	56%		4,180,000
2021	2023		41,900,000		26,400,000	63%		4,310,000
2022	2024		42,500,000		29,800,000	70%		4,460,000

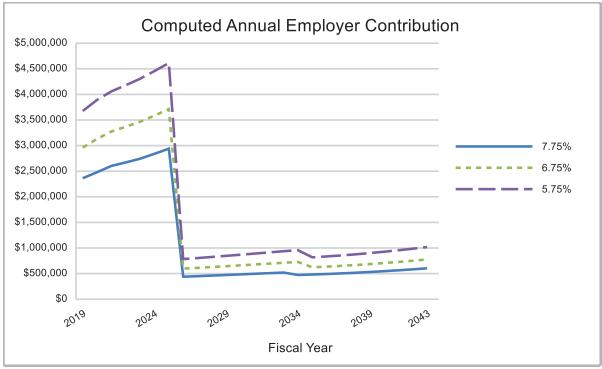
<sup>1</sup> Represents both the interest rate for discounting liabilities and the future investment return assumption on the Market Value of assets.

 $<sup>^{\</sup>rm 2}$  Valuation Assets do not include assets from Surplus divisions, if any.



Notes:

All projected funded percentages are shown with no phase-in.



Notes:

All projected contributions are shown with no phase-in.

# **Employer Contribution Details For the Fiscal Year Beginning July 1, 2019**

Table 1

			Employer Contributions <sup>1</sup>			Computed			
Division	Total Normal Cost	Employee Contribut. Rate	Employer Normal Cost	Payment of the Unfunded Accrued Liability <sup>4</sup>	Computed Employer Contribut. No Phase-In	Employer Contribut.	Blended ER Rate No Phase-In <sup>5</sup>	Blended ER Rate With Phase-In <sup>5</sup>	Employee Contribut. Conversion Factor <sup>2</sup>
Percentage of Payroll									
01 - Non-Union	12.78%	0.00%	-	-	-	-	51.98%	50.64%	
10 - Union	12.13%	0.00%	-	-	-	-	86.97%	84.78%	
11 - Non-Un on/aftr 7/1	8.49%	0.00%	8.49%	0.67%	9.16%	9.16%	51.98%	50.64%	0.86%
12 - Union hired after	7.39%	0.00%	7.39%	-0.48%	6.91%	6.91%	86.97%	84.78%	0.95%
Estimated Monthly Contribution <sup>3</sup>									
01 - Non-Union			\$ 8,569	\$ 37,036	\$ 45,605	\$ 44,373			
10 - Union			15,090	130,666	145,756	142,008			
11 - Non-Un on/aftr 7/1			2,132	167	2,299	2,299			
12 - Union hired after			3,468	(223)	3,245	3,245			
Total Municipality			\$ 29,259	\$ 167,646	\$ 196,905	\$ 191,925			
Estimated Annual Contribution <sup>3</sup>			\$ 351,108	\$ 2,011,752	\$ 2,362,860	\$ 2,303,100			

<sup>1</sup> The above employer contribution requirements are in addition to the employee contributions, if any.

## Please see the Comments on Asset Smoothing in the Executive Summary of this report.

<sup>&</sup>lt;sup>2</sup> If employee contributions are increased/decreased by 1.00% of pay, the employer contribution requirement will decrease/increase by the Employee Contribution Conversion Factor. The conversion factor is usually under 1%, because employee contributions may be refunded at termination of employment, and not used to fund retirement pensions. Employer contributions will all be used to fund pensions.

<sup>&</sup>lt;sup>3</sup> For divisions that are open to new hires, estimated contributions are based on projected fiscal year payroll. Actual contributions will be based on actual reported monthly pays, and will be different from the above amounts. For divisions that will have no new hires (i.e. closed divisions), invoices will be based on the above dollar amounts which are based on projected fiscal year payroll. See description of Open Divisions and Closed Divisions in the <u>Appendix</u>.

<sup>&</sup>lt;sup>4</sup> If projected assets exceed projected liabilities as of the beginning of the July 1, 2019 fiscal year, the negative unfunded accrued liability is treated as overfunding credit and is used to reduce the contribution. This amortization is used to reduce the employer contribution rate. Note that if the overfunding credit is larger than the normal cost, the full credit is shown above but the total contribution requirement is zero. This will cause the displayed normal cost and unfunded accrued liability contributions to not add across.

<sup>&</sup>lt;sup>5</sup> For linked divisions, the employer will be invoiced the Computed Employer Contribution with Phase-in rate shown above for each linked division (a contribution rate for the open division; a contribution dollar for the closed-but-linked division), unless the employer elects to contribute the Blended Employer Contribution rate shown above, by contacting MERS at 800-767-MERS (6377).

## **Benefit Provisions**

## Table 2

01 - Non-Union: Closed to new hires, linked to Division 11						
	2017 Valuation	2016 Valuation				
Benefit Multiplier:	2.25% Multiplier (80% max)	2.25% Multiplier (80% max)				
Normal Retirement Age:	60	60				
Vesting:	10 years	10 years				
Early Retirement (Unreduced):	55/25	55/25				
Early Retirement (Reduced):	50/25	50/25				
	55/15	55/15				
Final Average Compensation:	5 years	5 years				
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)				
<b>COLA for Current Retirees:</b>	2.50% (Non-Compound)	2.50% (Non-Compound)				
Employee Contributions:	0%	0%				
Act 88:	No	No				

10 - Union: Closed to new hires, linked to Division 12						
	2017 Valuation	2016 Valuation				
Benefit Multiplier:	2.25% Multiplier (80% max)	2.25% Multiplier (80% max)				
Normal Retirement Age:	60	60				
Vesting:	6 years	6 years				
Early Retirement (Unreduced):	50/25	50/25				
Early Retirement (Reduced):	55/15	55/15				
Final Average Compensation:	5 years	5 years				
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)				
COLA for Current Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)				
Employee Contributions:	0%	0%				
Act 88:	No	No				

11 - Non-Un on/aftr 7/1/2017: Open Division, linked to Division 01							
	2017 Valuation	2016 Valuation					
Benefit Multiplier:	1.50% Multiplier (80% max)	-					
Normal Retirement Age:	60	-					
Vesting:	6 years	-					
Early Retirement (Unreduced):	55/25	-					
Early Retirement (Reduced):	50/25	-					
	55/15						
Final Average Compensation:	5 years	-					
COLA for Future Retirees:	2.50% (Non-Compound)						
<b>Employee Contributions:</b>	0%	-					
Act 88:	No						

## Table 2 (continued)

12 - Union hired after 7/1/2012: Open Division, linked to Division 10								
	2017 Valuation	2016 Valuation						
Benefit Multiplier:	1.50% Multiplier (no max)	1.50% Multiplier (no max)						
Normal Retirement Age:	60	60						
Vesting:	6 years	6 years						
Early Retirement (Unreduced):	55/25	55/25						
Early Retirement (Reduced):	50/25	50/25						
	55/15	55/15						
Final Average Compensation:	5 years	5 years						
COLA for Future Retirees:	2.50% (Non-Compound)	2.50% (Non-Compound)						
<b>Employee Contributions:</b>	0%	0%						
Act 88:	No	No						

## **Participant Summary**

Table 3

	2017	' Va	luation	2016	S Va	aluation	2	2017 Valuati	on
Division	Number		Annual Payroll <sup>1</sup>	Number		Annual Payroll <sup>1</sup>	Average Age	Average Benefit Service <sup>2</sup>	Average Eligibility Service <sup>2</sup>
01 - Non-Union									
Active Employees	10	\$	873,917	11	\$	975,945	41.7	8.6	11.6
Vested Former Employees	2		22,449	2		22,449	50.0	7.7	13.1
Retirees and Beneficiaries	13		471,477	13		462,081	69.0		
10 - Union	İ								
Active Employees	19	\$	1,577,172	20	\$	1,553,250	47.5	15.7	15.7
Vested Former Employees	2		27,415	2		27,415	38.4	8.2	8.2
Retirees and Beneficiaries	45		1,525,453	44		1,441,694	68.6		
11 - Non-Un on/aftr 7/1/2									
Active Employees	2	\$	134,624		\$		44.1	0.3	0.3
Vested Former Employees	0		0				0.0	0.0	0.0
Retirees and Beneficiaries	0		0				0.0		
12 - Union hired after 7/									
Active Employees	6	\$	297,707	5	\$	199,412	26.9	1.9	1.9
Vested Former Employees	0		0	0		0	0.0	0.0	0.0
Retirees and Beneficiaries	0		0	0		0	0.0		
Total Municipality									
Active Employees	37	\$	2,883,420	36	\$	2,728,607	42.4	10.7	11.5
Vested Former Employees	4		49,864	4		49,864	44.2	8.0	10.7
Retirees and Beneficiaries	<u>58</u>		1,996,930	<u>57</u>		1,903,775	68.7		
Total Participants	99			97					

<sup>1</sup> Annual payroll for active employees; annual deferred benefits payable for vested former employees; annual benefits being paid for retirees and beneficiaries

 $<sup>^{2}\,</sup>$  Description can be found under Miscellaneous and Technical Assumptions in the  $\underline{\text{Appendix}}.$ 

## Reported Assets (Market Value)

Table 4

	2017 Va	aluation	2016 Valuation					
	Employer and		Employer and					
Division	Retiree <sup>1</sup>	Employee <sup>2</sup>	Retiree <sup>1</sup>	Employee <sup>2</sup>				
01 - Non-Union	\$ 4,775,765	\$ 5,762	\$ 4,135,061	\$ 5,762				
10 - Union	13,957,352	186,878	12,137,185	183,646				
11 - Non-Un on/aftr 7/1/2017	2,233	0						
12 - Union hired after 7/1/2012	58,533	0	36,802	0				
Municipality Total	\$ 18,793,883	\$ 192,640	\$ 16,309,048	\$ 189,408				
Combined Assets	\$18,986,523 \$16,498,456			98,456				

<sup>&</sup>lt;sup>1</sup> Reserve for Employer Contributions and Benefit Payments

The December 31, 2017 valuation assets (actuarial value of assets) are equal to 1.011321 times the reported market value of assets (compared to 1.077095 as of December 31, 2016). The derivation of valuation assets is described, and detailed calculations of valuation assets are shown, in the <u>Appendix</u>.

<sup>&</sup>lt;sup>2</sup> Reserve for Employee Contributions

#### Flow of Valuation Assets

#### Table 5

						I	nvestment						
Year							Income			Employee			Valuation
Ended		<b>Employer C</b>	ontributions	Em	ployee	(	(Valuation	Benefit	C	ontribution		Net	Asset
12/31	F	Required	Additional	Cont	ributions		Assets)	Payments		Refunds	·	Transfers	Balance
2011	\$	480,918	\$ 0	\$	0	\$	2,558,269	\$ (775,815)	\$	0	\$	14,645,174	\$ 16,908,546
2012		730,008	0		0		713,871	(1,411,666)		0		168	16,940,927
2013		717,265	0		0		953,208	(1,564,717)		0		65,418	17,112,101
2014		773,230	0		0		939,877	(1,626,244)		0		0	17,198,964
2015		858,331	0		0		803,331	(1,716,333)		0		0	17,144,293
2016		1,564,302	0		0		880,451	(1,818,642)		0		0	17,770,404
2017		1,960,161	293,235		0		1,108,480	(1,930,810)		0		0	19,201,470

#### Notes:

Transfers in and out are usually related to the transfer of participants between municipalities, and to employee payments for service credit purchases (if any) that the governing body has approved.

Additional employer contributions, if any, are shown separately starting in 2011. Prior to 2011, additional contributions are combined with the required employer contributions.

The investment income column reflects the recognized investment income based on Valuation Assets. It does not reflect the market value investment return in any given year.

The Valuation Assets include assets from Surplus divisions, if any.

# Actuarial Accrued Liabilities and Valuation Assets As of December 31, 2017

Table 6

Table 6							Unfunded
						((	Omunaea Overfunded)
		Actuarial				'	Accrued
Division	Ac	crued Liability	Valu	uation Assets <sup>1</sup>	Percent Funded		Liabilities
01 - Non-Union							
Active Employees	\$	2,218,719	\$	0	0.0%	\$	2,218,719
Vested Former Employees		140,293		0	0.0%		140,293
Retirees And Beneficiaries		5,156,346		4,835,659	93.8%		320,687
Pending Refunds		<u>0</u>		<u>0</u>	0.0%		<u>0</u>
Total	\$	7,515,358	\$	4,835,659	64.3%	\$	2,679,699
10 - Union							
Active Employees	\$	5,727,969	\$	186,878	3.3%	\$	5,541,091
Vested Former Employees		60,180		0	0.0%		60,180
Retirees And Beneficiaries		17,930,602		14,117,479	78.7%		3,813,123
Pending Refunds		<u>0</u>		<u>0</u>	0.0%		<u>0</u>
Total	\$	23,718,751	\$	14,304,357	60.3%	\$	9,414,394
11 - Non-Un on/aftr 7/1/2017				· · · · · · · · · · · · · · · · · · ·			
Active Employees	\$	13,083	\$	2,258	17.3%	\$	10,825
Vested Former Employees		0		0	0.0%		0
Retirees And Beneficiaries		0		0	0.0%		0
Pending Refunds		0		0	0.0%		0
Total	\$	13,083	\$	2,258	17.3%	\$	10,82 <b>5</b>
12 - Union hired after 7/1/2012		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·
Active Employees	\$	45,450	\$	59,196	130.2%	\$	(13,746)
Vested Former Employees		0		0	0.0%		0
Retirees And Beneficiaries		0		0	0.0%		0
Pending Refunds		<u>0</u>		<u>0</u>	0.0%		<u>0</u>
Total	\$	45,450	\$	59,196	130.2%	\$	(13,746)
Total Municipality				· · · · · · · · · · · · · · · · · · ·			
Active Employees	\$	8,005,221	\$	248,332	3.1%	\$	7,756,889
Vested Former Employees		200,473		0	0.0%		200,473
Retirees and Beneficiaries		23,086,948		18,953,138	82.1%		4,133,810
Pending Refunds		<u>0</u>		<u>0</u>	<u>0.0%</u>		<u>0</u>
Total	\$	31,292,642	\$	19,201,470	61.4%	\$	12,091,172
The following results show the combined ac	crue	ed liabilities and	asse	ets for each set	of linked divisions. 7	hes	e results are
The following results show the combined ac already included in the table above.	crue	ed liabilities and	asse	ets for each set	of linked divisions. 1	hes	e results are
	crue	ed liabilities and	asse	ets for each set	of linked divisions. 1	hes	e results are
already included in the table above.  Linked Divisions 11, 01	ccrue     \$					hes \$	
already included in the table above.  Linked Divisions 11, 01  Active Employees		2,231,802	asse \$	ets for each set  2,258 0	0.1%		2,229,544
already included in the table above. Linked Divisions 11, 01 Active Employees Vested Former Employees		2,231,802 140,293		2,258 0	0.1% 0.0%		2,229,544 140,293
already included in the table above.  Linked Divisions 11, 01  Active Employees		2,231,802		2,258	0.1%		2,229,544

## Table 6 (continued)

Division	Acc	Actuarial crued Liability	Valu	uation Assets <sup>1</sup>	Percent Funded	(C	Unfunded Overfunded) Accrued Liabilities
Linked Divisions 12, 10							
Active Employees	\$	5,773,419	\$	246,074	4.3%	\$	5,527,345
Vested Former Employees		60,180		0	0.0%		60,180
Retirees and Beneficiaries		17,930,602		14,117,479	78.7%		3,813,123
Pending Refunds		<u>0</u>		<u>0</u>	0.0%		<u>0</u>
Total	\$	23,764,201	\$	14,363,553	60.4%	\$	9,400,648

<sup>&</sup>lt;sup>1</sup> Includes both employer and employee assets.

Please see the Comments on Asset Smoothing in the Executive Summary of this report.

## **Actuarial Accrued Liabilities - Comparative Schedule**

Table 7

Valuation Date December 31	Ac	Actuarial crued Liability	Val	uation Assets	Percent Funded	(0	Unfunded Overfunded) Accrued Liabilities
2011	\$	24,854,814	\$	16,908,546	68%	\$	7,946,268
2012	İ	25,730,036		16,940,927	66%		8,789,109
2013	İ	26,572,254		17,112,101	64%		9,460,153
2014		27,378,082		17,198,964	63%		10,179,118
2015	İ	30,003,164		17,144,293	57%		12,858,871
	İ						
2016		30,235,205		17,770,404	59%		12,464,801
2017		31,292,642		19,201,470	61%		12,091,172

Notes: Actuarial assumptions were revised for the 2004, 2008, 2009, 2010, 2011, 2012 and 2015 actuarial valuations.

The Valuation Assets include assets from Surplus divisions, if any.

#### **Division 01 - Non-Union**

Table 8-01: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2011	\$ 5,615,827	\$ 4,061,061	72%	\$ 1,554,766
2012	5,870,582	4,170,628	71%	1,699,954
2013	6,403,787	4,277,213	67%	2,126,574
2014	6,687,334	4,252,900	64%	2,434,434
2015	7,260,578	4,235,261	58%	3,025,317
2016	7,268,887	4,460,060	61%	2,808,827
2017	7,515,358	4,835,659	64%	2,679,699

Notes: Actuarial assumptions were revised for the 2008, 2009, 2010, 2011, 2012 and 2015 actuarial valuations.

**Table 9-01: Computed Employer Contributions - Comparative Schedule** 

	Active	Employees	Computed	Employee
Valuation Date		Annual	Employer	Contribution
December 31	Number	Payroll	Contribution <sup>1</sup>	Rate <sup>2</sup>
2011	13	\$ 995,465	19.53%	0.00%
2012	12	999,231	21.26%	0.00%
2013	9	734,440	29.16%	0.00%
2014	10	833,871	29.14%	0.00%
2015	9	801,888	35.88%	0.00%
2016	11	975,945	30.16%	0.00%
		1		
2017	10	873,917	\$ 45,605	0.00%

<sup>1</sup> For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

**Note:** The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 6.

<sup>&</sup>lt;sup>2</sup> For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

#### **Division 10 - Union**

Table 8-10: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2011	\$ 19,238,987	\$ 12,847,485	67%	\$ 6,391,502
2012	19,857,774	12,769,362	64%	7,088,412
2013	20,160,852	12,829,303	64%	7,331,549
2014	20,673,882	12,933,829	63%	7,740,053
2015	22,708,074	12,884,996	57%	9,823,078
2016	22,921,259	13,270,705	58%	9,650,554
2017	23,718,751	14,304,357	60%	9,414,394

Notes: Actuarial assumptions were revised for the 2008, 2009, 2010, 2011, 2012 and 2015 actuarial valuations.

**Table 9-10: Computed Employer Contributions - Comparative Schedule** 

	Active I	Employees	Computed	Employee
Valuation Date		Annual	Annual Employer	
December 31	Number	Payroll	Payroll Contribution <sup>1</sup>	
2011	29	\$ 1,943,524	30.03%	0.00%
2012	27	1,913,911	\$ 52,526	0.00%
2013	26	1,866,308	\$ 53,578	0.00%
2014	26	1,950,871	\$ 57,972	0.00%
2015	21	1,774,328	\$ 73,328	0.00%
2010		4 550 050	A =0.455	
2016	20	1,553,250	\$ 70,455	0.00%
2017	19	1,577,172	\$ 145,756	0.00%

<sup>1</sup> For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

**Note:** The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 6.

<sup>&</sup>lt;sup>2</sup> For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

#### Division 11 - Non-Un on/aftr 7/1/2017

Table 8-11: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities	
2017	\$ 13,083	\$ 2,258	17%	\$ 10,825	

Notes: Actuarial assumptions were revised for the 2008, 2009, 2010, 2011, 2012 and 2015 actuarial valuations.

## **Table 9-11: Computed Employer Contributions - Comparative Schedule**

	Active Employees			Computed	Employee	
Valuation Date		Annual		Employer	Contribution	
December 31	Number	Payroll		Contribution <sup>1</sup>	Rate <sup>2</sup>	
2017	2	\$	134,624	9.16%	0.00%	

<sup>1</sup> For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

**Note:** The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 6.

<sup>&</sup>lt;sup>2</sup> For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

#### Division 12 - Union hired after 7/1/2012

Table 8-12: Actuarial Accrued Liabilities - Comparative Schedule

Valuation Date December 31	Actuarial Accrued Liability	Valuation Assets	Percent Funded	Unfunded (Overfunded) Accrued Liabilities
2012	\$ 1,680	\$ 937	56%	\$ 743
2013	7,615	5,585	73%	2,030
2014	16,866	12,235	73%	4,631
2015	34,512	24,036	70%	10,476
2016	45,059	39,639	88%	5,420
2017	45,450	59,196	130%	(13,746)

Notes: Actuarial assumptions were revised for the 2008, 2009, 2010, 2011, 2012 and 2015 actuarial valuations.

**Table 9-12: Computed Employer Contributions - Comparative Schedule** 

	Active	Employees	Computed	Employee		
Valuation Date		Annual	Annual Employer			
December 31	Number	Payroll	Contribution <sup>1</sup>	Rate <sup>2</sup>		
2012	1	\$ 24,829	7.27%	0.00%		
2013	2	64,040	7.22%	0.00%		
2014	2	77,749	7.39%	0.00%		
2015	4	160,513	7.31%	0.00%		
2016	5	199,412	7.37%	0.00%		
2017	6	297,707	6.91%	0.00%		

<sup>1</sup> For open divisions, a percent of pay contribution is shown. For closed divisions, a monthly dollar contribution is shown.

**Note:** The contributions shown in Table 9 for the 12/31/2015 through 12/31/2019 valuations do **not** reflect the phase-in of the increased contribution requirements associated with the new actuarial assumptions. The full contribution without phase-in is shown in Table 9 above. The contribution requirements including the 5-year phase-in are shown on page 6.

<sup>&</sup>lt;sup>2</sup> For each valuation year, the computed employer contribution is based on the employee rate. If the employee rate changes during the applicable fiscal year, the computed employer contribution will be adjusted.

#### **Division 01 - Non-Union**

**Table 10-01: Layered Amortization Schedule** 

				Amounts for Fiscal Year Beginning 7/1/2019				
Type of UAL	Date Established	Original Balance <sup>1</sup>	Original Amortization Period <sup>2</sup>		utstanding \L Balance <sup>3</sup>	Remaining Amortization Period <sup>2</sup>	Α	Annual mortization Payment
Initial	12/31/2015 \$	3,025,317	23	\$	3,206,380	7	\$	530,976
(Gain)/Loss	12/31/2016	(315,972)	22		(355,778)	7		(58,920)
(Gain)/Loss	12/31/2017	(149,162)	7		(166,834)	7		(27,624)
Total				\$	2,683,768		\$	444,432

<sup>&</sup>lt;sup>1</sup> For each type of UAL (layer), this is the original balance as of the date the layer was established.

The unfunded accrued liability (UAL) as of December 31, 2017 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2017 valuation to take into account the expected future contributions that are based on past valuations. Each type of UAL (layer) is amortized over the appropriate period. Please see the <u>Appendix</u> on the MERS website for a detailed description of the amortization policy.

<sup>&</sup>lt;sup>2</sup> According to the MERS amortization policy, each type of UAL (layer) is amortized over a specific period (see <u>Appendix</u> on MERS website).

<sup>&</sup>lt;sup>3</sup> This is the remaining balance as of the valuation date, projected to the beginning of the fiscal year shown above.

## **Division 10 - Union**

**Table 10-10: Layered Amortization Schedule** 

				Amounts for Fiscal Year Beginning 7/1/2019				
Type of UAL	Date Established	Original Balance <sup>1</sup>	Original Amortization Period <sup>2</sup>		outstanding AL Balance <sup>3</sup>	Remaining Amortization Period <sup>2</sup>	A	Annual mortization Payment
Initial	12/31/2015 \$	9,823,078	23	\$	10,412,472	7	\$	1,724,280
(Gain)/Loss	12/31/2016	(471,039)	22		(530,373)	7		(87,828)
(Gain)/Loss	12/31/2017	(369,638)	7		(413,431)	7		(68,460)
Total				\$	9,468,668		\$	1,567,992

<sup>&</sup>lt;sup>1</sup> For each type of UAL (layer), this is the original balance as of the date the layer was established.

The unfunded accrued liability (UAL) as of December 31, 2017 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2017 valuation to take into account the expected future contributions that are based on past valuations. Each type of UAL (layer) is amortized over the appropriate period. Please see the <u>Appendix</u> on the MERS website for a detailed description of the amortization policy.

<sup>&</sup>lt;sup>2</sup> According to the MERS amortization policy, each type of UAL (layer) is amortized over a specific period (see <u>Appendix</u> on MERS website).

<sup>&</sup>lt;sup>3</sup> This is the remaining balance as of the valuation date, projected to the beginning of the fiscal year shown above.

#### Division 11 - Non-Un on/aftr 7/1/2017

**Table 10-11: Layered Amortization Schedule** 

				Am	ounts for Fi	scal Year Beg	inning 7/	/2019
Type of UAL	Date Established	Original Balance <sup>1</sup>	Original Amortization Period <sup>2</sup>		itstanding L Balance <sup>3</sup>	Remaining Amortization Period <sup>2</sup>	Annı Amortiz Paym	ation
(Gain)/Loss	12/31/2017	\$ 10,832	7	\$	12,115	7	\$	2,004
Total				\$	12,115		\$	2,004

<sup>&</sup>lt;sup>1</sup> For each type of UAL (layer), this is the original balance as of the date the layer was established.

The unfunded accrued liability (UAL) as of December 31, 2017 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2017 valuation to take into account the expected future contributions that are based on past valuations. Each type of UAL (layer) is amortized over the appropriate period. Please see the <a href="Appendix">Appendix</a> on the MERS website for a detailed description of the amortization policy.

<sup>&</sup>lt;sup>2</sup> According to the MERS amortization policy, each type of UAL (layer) is amortized over a specific period (see <u>Appendix</u> on MERS website).

<sup>&</sup>lt;sup>3</sup> This is the remaining balance as of the valuation date, projected to the beginning of the fiscal year shown above.

## Division 12 - Union hired after 7/1/2012

**Table 10-12: Layered Amortization Schedule** 

				Am	ounts for Fi	scal Year Begi	inning 7/1/2019
Type of UAL	Date Established	Original Balance <sup>1</sup>	Original Amortization Period <sup>2</sup>		ıtstanding L Balance <sup>3</sup>	Remaining Amortization Period <sup>2</sup>	Annual Amortization Payment
(Gain)/Loss	12/31/2017	\$ (14,427)	7	\$	(16,136)	7	\$ (2,676)
Total				\$	(16,136)		\$ (2,676)

<sup>&</sup>lt;sup>1</sup> For each type of UAL (layer), this is the original balance as of the date the layer was established.

The unfunded accrued liability (UAL) as of December 31, 2017 (see Table 6) is projected to the beginning of the fiscal year for which the contributions are being calculated. This allows the 2017 valuation to take into account the expected future contributions that are based on past valuations. Each type of UAL (layer) is amortized over the appropriate period. Please see the <a href="Appendix">Appendix</a> on the MERS website for a detailed description of the amortization policy.

<sup>&</sup>lt;sup>2</sup> According to the MERS amortization policy, each type of UAL (layer) is amortized over a specific period (see <u>Appendix</u> on MERS website).

<sup>&</sup>lt;sup>3</sup> This is the remaining balance as of the valuation date, projected to the beginning of the fiscal year shown above.

#### **GASB 68 Information**

The following information has been prepared to provide some of the information necessary to complete GASB Statement No. 68 disclosures. Statement 68 is effective for fiscal years beginning after June 15, 2014. Additional resources, including an Implementation Guide, are available at <a href="https://www.mersofmich.com">www.mersofmich.com</a>.

Actuarial Valuation Date:	12/31/2017
Measurement Date of Total Pension Liability (TPL):	12/31/2017
At 12/31/2017, the following employees were covered by the benefit terms:	
Inactive employees or beneficiaries currently receiving benefits:	58
Inactive employees entitled to but not yet receiving benefits:  Active employees:	4 <u>37</u>
	99
Covered employee payroll: (Needed for Required Supplementary Information)	\$ 2,883,420
Average expected remaining service lives of all employees (active and inactive):	4
Total Pension Liability as of 12/31/2016 measurement date:	\$ 29,463,200
Total Pension Liability as of 12/31/2017 measurement date:	\$ 30,499,280
Service Cost for the year ending on the 12/31/2017 measurement date:	\$ 310,387
Change in the Total Pension Liability due to:	
- Benefit changes <sup>1</sup> :	\$ 0
- Differences between expected and actual experience <sup>2</sup> :	\$ 363,115
- Changes in assumptions <sup>2</sup> :	\$ 0

<sup>&</sup>lt;sup>1</sup> A change in liability due to benefit changes is immediately recognized when calculating pension expense for the year.

Sensitivity of the Net Pension Liability to changes in the discount rate:

Note: The current discount rate shown for GASB 68 purposes is higher than the MERS assumed rate of return. This is because for GASB 68 purposes, the discount rate must be gross of administrative expenses, whereas for funding purposes it is net of administrative expenses.

<sup>&</sup>lt;sup>2</sup> Changes in liability due to differences between actual and expected experience, and changes in assumptions, are recognized in pension expense over the average remaining service lives of all employees.

# **Benefit Provision History**

The following benefit provision history is provided by MERS. Any corrections to this history or discrepancies between this information and information displayed elsewhere in the valuation report should be reported to MERS. All provisions are listed by date of adoption.

01 - Non-Union	
1/1/2017	Service Credit Purchase Estimates - No
12/1/2016	Service Credit Purchase Estimates - Yes
7/1/2014	Custom Amortization - See comments
1/1/2012	E1 2.5% COLA for past retirees (03/01/2011)
1/1/2012	E2 2.5% COLA for future retirees (03/01/2011)
3/1/2011	Member Contribution Rate 0.00%
3/1/2011	Fiscal Month - July
3/1/2011	Day of work defined as 8 Hours a Day for All employees.
3/1/2011	Benefit FAC-5 (5 Year Final Average Compensation)
3/1/2011	Exclude Temporary Employees
3/1/2011	10 Year Vesting
3/1/2011	Benefit B-3 (80% max)
3/1/2011	Benefit F55 (With 25 Years of Service)
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

10 - Union	
1/1/2017	Service Credit Purchase Estimates - No
12/1/2016	Service Credit Purchase Estimates - Yes
7/1/2014	Custom Amortization - See comments
1/1/2012	E1 2.5% COLA for past retirees (01/01/1991)
1/1/2012	E2 2.5% COLA for future retirees (03/01/2011)
3/1/2011	Day of work defined as 8 Hours a Day for All employees.
3/1/2011	Benefit FAC-5 (5 Year Final Average Compensation)
3/1/2011	Exclude Temporary Employees
3/1/2011	6 Year Vesting
3/1/2011	Benefit B-3 (80% max)
3/1/2011	Benefit F50 (With 25 Years of Service)
3/1/2011	Member Contribution Rate 0.00%
3/1/2011	Fiscal Month - July
	Defined Benefit Normal Retirement Age - 60

## 11 - Non-Un on/aftr 7/1/2017

7/1/2017	Day of work defined as 5 Hours a Day for All employees.
7/1/2017	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/2017	Non Standard Compensation Definition
7/1/2017	Exclude Temporary Employees
7/1/2017	6 Year Vesting
7/1/2017	Defined Benefit Normal Retirement Age - 60

Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

# 11 - Non-Un on/aftr 7/1/2017

7/1/2017	Service Credit Purchase Estimates - No
7/1/2017	1.5% multiplier (80% max)
7/1/2017	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years
7/1/2017	Benefit F55 (With 25 Years of Service)
7/1/2017	Participant Contribution Rate 0%
7/1/2017	E2 2.5% COLA for future retirees (7/1/2017)
7/1/2014	Custom Amortization - See comments
3/1/2011	Fiscal Month - July

# 12 - Union hired after 7/1/2012

1/1/2017	Service Credit Purchase Estimates - No
12/1/2016	Service Credit Purchase Estimates - Yes
7/1/2014	Custom Amortization - See comments
7/1/2012	Benefit FAC-5 (5 Year Final Average Compensation)
7/1/2012	Non Standard Compensation Definition
7/1/2012	6 Year Vesting
7/1/2012	Benefit C-1 (New)
7/1/2012	Benefit F55 (With 25 Years of Service)
7/1/2012	E2 2.5% COLA for future retirees (07/01/2012)
7/1/2012	Day of work defined as 5 Hours a Day for All employees.
3/1/2011	Fiscal Month - July
	Defined Benefit Normal Retirement Age - 60
	Early Reduced (.5%) at Age 50 with 25 Years or Age 55 with 15 Years

# Plan Provisions, Actuarial Assumptions, and Actuarial Funding Method

Details on MERS plan provisions, actuarial assumptions, and actuarial methodology can be found in the <u>Appendix</u>. Some actuarial assumptions are specific to this municipality and its divisions. These are listed below.

# **Increase in Final Average Compensation**

Division	FAC Increase Assumption
All Divisions	0.00%

# Withdrawal Rate Scaling Factor

Division	Withdrawal Rate Scaling Factor
All Divisions	100%

# **Miscellaneous and Technical Assumptions**

Loads - None.

Please see highlighted text showing approval of accelerated funding for the current and past fiscal year.

# TRAVERSE CITY LIGHT AND POWER BOARD

Attachment - 4a

Minutes of Regular Meeting Held at 5:15 p.m., Commission Chambers, Governmental Center Tuesday, March 22, 2016

#### **Board Members -**

Present:

Pat McGuire, Jeff Palisin, Amy Shamroe, Bob Spence, Jan Geht

Absent:

Tim Werner, John Taylor

#### Ex Officio Member -

Present:

Penny Hill, Assistant City Manager

Others:

Tim Arends, W. Peter Doren, Karla Myers-Beman, Pete Schimpke, Kelli

Schroeder, Jennifer St. Amour, Stephanie Tvardek

The meeting was called to order at 5:15 p.m. by Vice Chairman Geht.

#### Item 2 on the Agenda being Consent Calendar

Moved by McGuire, seconded by Shamroe, that the following actions, as recommended on the Consent Calendar portion of the Agenda, be approved:

- a. Minutes of the Regular Meeting of March 8, 2016.
- b. Purchase order to Power Line Supply for optical wire for the LaFranier/Barlow Transmission Line Upgrade Project.
- c. Electric Utility 2016-17 Operating Budget.

CARRIED unanimously. (Werner, Taylor absent)

## Items Removed from the Consent Calendar

None.

#### Item 3 on the Agenda being Unfinished Business

None.

#### Item 4 on the Agenda being New Business

None.

#### Item 5 on the Agenda being Appointments

None.

#### Item 6 on the Agenda being Reports and Communications

a. From Legal Counsel.

None.

- b. From Staff.
  - 1. Tim Arends and Board discussed the potential transfer of River Road customers to Cherryland Electric Cooperative.

The following individuals addressed the Board:

W. Peter Doren, General Counsel Karla Myers-Beman, Controller Penny Hill, Assistant City Manager

2. Karla Myers-Beman presented the 2015 Annual Report to customers.

The following individuals addressed the Board:

Tim Arends, Executive Director

- 3. Tim Arends polled the Board for availability for the April 12, 2016 Regular Meeting. A majority of the Board members will be available, the meeting stands.
- c. From Board.
  - 1. Jan Geht congratulated Pat McGuire on his reappointment to the TCL&P Board.

## Item 7 on the Agenda being Public Comment

No one from the public commented.

There being no objection, Vice Chairman Geht declared the meeting adjourned at 5:39 p.m.

Tim Arends, Secretary

LIGHT AND POWER BOARD

/st

#### A REGULAR MEETING

Of The

#### TRAVERSE CITY LIGHT AND POWER BOARD

Will Be Held On

TUESDAY, March 22, 2016

At

5:15 p.m.

In The

#### **COMMISSION CHAMBERS**

(2<sup>nd</sup> floor, Governmental Center) 400 Boardman Avenue

Traverse City Light and Power will provide necessary reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting, to individuals with disabilities at the meeting/hearing upon notice to Traverse City Light and Power. Individuals with disabilities requiring auxiliary aids or services should contact the Light and Power Department by writing or calling the following.

Stephanie Tvardek Administrative Assistant 1131 Hastings Street Traverse City, MI 49686 (231) 922-4940 ext. 201

Traverse City Light and Power 1131 Hastings Street Traverse City, MI 49686 (231) 922-4940 Posting Date: 03-18-16 4:00 p.m.

#### **AGENDA**

## Pledge of Allegiance

#### 1. Roll Call

#### 2. Consent Calendar

The purpose of the consent calendar is to expedite business by grouping non-controversial items together to be dealt with by one Board motion without discussion. Any member of the Board, staff or the public may ask that any item on the consent calendar be removed therefrom and placed elsewhere on the agenda for full discussion. Such requests will be automatically respected. If an item is not removed from the consent calendar, the action noted in parentheses on the agenda is approved by a single Board action adopting the consent calendar.

- a. Consideration of approving minutes of the Regular Meeting of March 8, 2016. (Approval recommended) (p.4)
- Consideration of authorizing a purchase order to Power Line Supply for optical wire for the LaFranier/Barlow Transmission Line Upgrade Project. (Approval recommended) (Schimpke) (p.7)
- c. Consideration of approving the Electric Utility 2016-17 Operating Budget. (Approval recommended) (Myers-Beman) (p.8)

#### Items Removed from the Consent Calendar

a.

#### 3. Unfinished Business

None.

#### 4. New Business

None.

#### 5. Appointments

None.

#### 6. Reports and Communications

- a. From Legal Counsel.
- From Staff.
  - 1. Discussion of the potential transfer of River Road customers to Cherryland Electric Cooperative. (Arends) (p.14)
  - 2. Presentation of the 2015 Annual Report to customers. (Myers-Beman) (p.17)

- 3. Consideration of canceling the April 12, 2016 Regular Board meeting. (Arends) (verbal)
- c. From Board.

# 7. Public Comment

/st

## TRAVERSE CITY LIGHT AND POWER BOARD

Minutes of Regular Meeting
Held at 5:15 p.m., Commission Chambers, Governmental Center
Tuesday, March 8, 2016

#### Board Members -

Present:

Pat McGuire, Jeff Palisin, Amy Shamroe, Bob Spence, Tim Werner, Jan

Geht, John Taylor

#### Ex Officio Member -

Present:

Marty Colburn, City Manager

Others:

Tim Arends, Scott Menhart, Karla Myers-Beman, Pete Schimpke, Kelli

Schroeder

The meeting was called to order at 5:15 p.m. by Chairman Taylor.

# Item 2 on the Agenda being Consent Calendar

Moved by McGuire, seconded by Shamroe, that the following actions, as recommended on the Consent Calendar portion of the Agenda, be approved:

- a. Minutes of the Regular Meeting of February 23, 2016
- b. Board policies:
  - 1. Time Card Policy
  - 2. Employee Conduct Policy
- c. Consultant Agreement with CS Research & Consulting, LLC for the 2016 Funding Survey.
- d. Purchase order to RESCO in the amount of \$196,083 for transmission poles for the LaFranier/Barlow Transmission Line Upgrade Project.

CARRIED unanimously.

# **Items Removed from the Consent Calendar**

None.

#### Item 3 on the Agenda being Unfinished Business

None.

# Item 4 on the Agenda being New Business

None.

#### Item 5 on the Agenda being Appointments

None.

#### Item 6 on the Agenda being Reports and Communications

a. From Legal Counsel.

None.

- b. From Staff.
  - 1. Karla Myers-Beman presented the 2016-17 Electric Fund budget.

The following individuals addressed the Board

Tim Arends, Executive Director
Marty Colburn, City Manager
Kelli Schroeder, Manager of HR and Communications

- c. From Board.
  - 1. Marty Colburn stated the billing from TCL&P for tree trimming assistance during the August storm has been paid in full by the City. Marty explained the \$100,000 funding from the state has been split 84%-16% between TCL&P and the City.
  - 2. Bob Spence asked for an update regarding the Garland Street project.

The following individuals addressed the Board:

Marty Colburn, City Manager Tim Arends, Executive Director

# Item 7 on the Agenda being Public Comment

No one from the public commented.

There being no objection, Chairman Taylor declared the meeting adjourned at 5:56 p.m.

Tim Arends, Secretary LIGHT AND POWER BOARD

/st

## FOR THE LIGHT & POWER BOARD MEETING OF MARCH 22, 2016



To:

Light & Power Board

From:

Karla Myers-Beman, Controller

Date:

March 15, 2016

Subject:

Electric Fund Budget

In accordance with City Charter Chapter XVIII, section 179 (o), the 2016-17 Electric Fund Operating Budget must be submitted to the City Commission by its last meeting in April.

The Electric Fund was reviewed by the Board at the last meeting, March 8, 2016 and no changes have been made since the initial presentation. The budget is attached for your reference.

Included with the adoption of the budget staff understands the Board would like to select the ten year amortization based on the market value of assets option for contributions into the Municipal Employees' Retirement System ("MERS"). This selection does not directly affect the income statement, but rather the Utility's cash flow statement. Additionally, this will be reviewed by staff and brought to the Board during the budget process on an annual basis going forward.

Staff recommends that the Board approve submittal of the 2016-17 Electric Fund Budget to the City Commission for its consideration.

This item is appearing on the Consent Calendar as it is deemed by staff to be a non-controversial item. Approval of this item on the Consent Calendar means you agree with staff's recommendation.

If any member of the Board or the public wishes to discuss this matter, other than clarifying questions, it should be placed on the "Items Removed from the Consent Calendar" portion of the agenda for full discussion.

If after Board discussion you agree with staff's recommendation the following motion would be appropriate:

MOVED BY , SECONDED BY , THAT THE

LIGHT & POWER BOARD APPROVES SUBMITTAL OF THE 2016-17 ELECTRIC FUND OPERATING BUDGET AS PRESENTED TO THE CITY COMMISSION FOR ITS CONSIDERATION. IN ADDITION, THE BOARD DIRECTS STAFF TO CONTRIBUTE INTO THE RETIREMENT SYSTEM BASED ON THE TEN YEAR AMORTIZATION CALCULATED ON THE MARKET VALUE OF ASSETS OPTION PROVIDED BY MERS.

	FY 13/14 Actual		FY 14/15 Actual		FY 15/16 Budget		FY 15/16 Projected		FY 16/17 Requested
Operating Income:	\$ 35,292,126	\$	37,143,589	\$	35,928,700	\$	35,697,300	\$	37,091,900
Operating Expenses:				2					
Generation Expenses:				1					
Capacity	\$ -	\$	12,000	S	672,000	\$	539,000	\$	745,000
Purchased Power - MISO	128,612	8	(358,421)		257,800		817,000		1,401,000
Purchased Power - Lansing BWL	5,950,586		5,675,258		3,091,000		2,874,000		0
Stoney Corners - Wind Energy	2,890,566		2,819,687		3,257,000		3,227,500		3,170,000
Combustion Turbine Power Cost	3,081,983		3,364,832	10 10	4,714,000		3,840,600		4,272,000
Campbell #3 Power Cost	5,372,167		4,850,934		4,580,000		4,066,600		4,412,000
Belle River #1 Power Cost	5,191,796		5,349,402	10	4,364,000		3,770,000		4,187,000
Landfill Gas - Granger Project	396,367		494,766		1,127,000		800,000		1,118,000
M-72 Wind Turbine	,		8,890		42,000		37,000		37,000
Bilateral Contracts	3,345		292,322		2,357,000		2,522,000		4,286,000
Other Generation Expenses	203,704		345,503		317,100		357,550		449,650
Total Generation Expenses	23,219,126		22,855,173		24,778,900		22,851,250		24,077,650
Distribution Expenses:				i			, , , ,		
Operations & Maintenance	3,355,752		3,530,929		3,976,150		4,011,750		3,886,250
Operations & maintenance	0,000,702		0,000,020		0,010,100		4,011,700		0,000,200
Transmission Expenses:				52					
Operations & Maintenance	299,449		406,584		359,300		401,300		437,000
Other Operating Expenses:									
Metering & Customer Accounting	479,851		568,692		521,500		548,050		559,350
Conservation & Public Services	440,260		513,302		679,400		607,520		486,000
Administrative & General	753,148		834,938		901,800		946,950		1,187,800
Insurance	59,502		57,875		63,000		63,000		65,500
Depreciation Expense	2,027,184		2,157,940		2,150,000		2,300,000		2,525,000
City Fee	1,775,851		1,863,259		1,801,000		1,790,000		1,870,000
Total Other Operating Expenses	5,535,796		5,996,006		6,116,700		6,255,520		6,693,650
Total Operating Expenses	32,410,123		32,788,692		35,231,050		33,519,820		35,094,550
Operating Income	\$ 2,882,003	Ś		•		•	0.488.400	\$	1 997 350
Operating income	\$ 2,002,000	Ą	4,354,897	\$	697,650	Ÿ	2,177,480	٧	1,997,350
Non Operating Revenues/(Expenses):									
Non Operating Revenues	1,149,156		544,543		456,750		484,200		369,200
Non Operating Expenses			(428,620)	ř.					
Total Non Operating Revenue	1,149,156		115,923		456,750		484,200	iii	369,200
	1,140,100		110,020	9	400,100		707,200		000,200
OTHER FINANCING SOURCES:									
	_		_ 1		_		175,000		175,000
Transfers in									
Transfers in							110,000		110,000

		FY 13/14 Actual		FY 14/15 Actual		FY 15/16 Budget		FY 15/16 Projected		FY 16/17 Requested
OPERATING REVENUES:					3			2	*5	
Residential Sales	\$	6,382,044	S	6,612,011	\$	6,338,000	\$	6,100,000	\$	6,375,000
Commercial Sales	•	15,612,427	*	16,392,293	•	15,766,500		15,300,000	26 <b>1</b> 35	16,150,000
Industrial Sales		9,950,825		10,788,926		10,040,000		9,800,000		10,770,000
Public Authority Sales		296,800		317,521		286,000		300,100		315,000
Street Lighting Sales		195,178		199,517		195,000	*	195,000		195,000
Yard Light Sales		79,551		86,531		82,000		80,000		82,000
Forfeited Discounts		57,695		73,522		60,000		70,000		70,000
Merchandise and Jobbing		43,443		115,918		187,000		281,500		64,200
Recovery of Bad Debts		188		30		200		200		200
Sale of Scrap		34,332		30,804		35,000		35,000		35,000
Miscellaneous Income		37,383		42,535		38,500		33,000		33,000
Refunds and Rebates		1,413		2,481		500		2,500		2,500
MISO Revenue		2,600,847		2,481,500		2,900,000		3,500,000		3,000,000
WIGO Revenue	-						1 1000			
TOTAL OPERATING REVENUES	\$	35,292,126	\$	37,143,589	\$	35,928,700	\$	35,697,300	\$	37,091,900
OPERATING EXPENSES:										
GENERATION-OPERATING & MAINTENAL	NCE	:								
Salaries and Wages	\$	-	\$	104,905	\$	125,400	\$	116,000	\$	152,100
Fringe Benefits	•	-		96,876	•	85,600		116,300	385	148,800
Wind Generation - Traverse		16,148		60				-		-
Trap and Transfer		74		95		250		250		250
Union Street Fish Ladder		_				250	į.	250		250
Operation Supplies		653		470		1,000		1,000		1,000
Capacity Purchases		-		12,000		672,000		539,000		745,000
Purchased Power - MISO		128,612		(358,421)		257,800		817,000		1,401,000
Purchased Power - LBWL		5,950,586		5,675,258		3,091,000		2,874,000		-
Stoney Corners - Wind Energy		2,890,566		2,819,687		3,257,000		3,227,500		3,170,000
Combustion Turbine Power Cost		3,081,983		3,364,832		4,714,000		3,840,600		4,272,000
Campbell #3 Power Cost		5,372,167		4,850,934		4,580,000		4,066,600		4,412,000
Belle River #1 Power Cost		5,191,796		5,349,402		4,364,000		3,770,000		4,187,000
Landfill Gas - NANR & Granger Project		396,367		494,766		1,127,000		800,000		1,118,000
M72 Wind Turbine		-		8,890		42,000		37,000		37,000
Bilateral Contracts		3,345		292,322		2,357,000		2,522,000		4,286,000
Total Purchased Power		23,015,422		22,509,670		24,461,800		22,493,700		23,628,000
Puchased Power Cost as % of Sales		70.78%		65.44%		74.79%		70.79%		69.73%
Coal Dock		8,075		9,367	is .	2,500		2,500		-
Communications		421		1,084		1,500		250		250
Meal Payments		-		80		200		200		200
Safety		2,765		2,201		3,500		3,500		3,500
Tools		38		-		500		500		500
Professional and Contractual		174,219		113,124	-	68,000	21	94,000		110,000
Transportation				9,618		11,500		8,000		9,800
Professional Development		1,311		-		2,000		2,000		2,000
Uniforms		-		2,156		2,500		3,500		3,500
Vehicle Rentals				8,243		12,400		9,300		17,500
Miscellaneous		E-		(2,776)		-				-
Total Generation O & M		23,219,126		22,855,173		24,778,900		22,851,250		24,077,650

	FY 13/14 Actual	FY 14/15 Actual	FY 15/16 Budget	FY 15/16 Projected	FY 16/17 Requested
DISTRIBUTION OREDATION & MAIL	NITENIANCE.				· · · · · · · · · · · · · · · · · · ·
DISTRIBUTION OPERATION & MAIR Salaries and Wages	NIENANCE:	1,223,372	1,550,600	1,186,000	1,247,000
Fringe Benefits	•	1,077,958	1,100,400	1,155,900	1,247,000
Office Supplies	4,404	2,176	4,700	2,500	4,000
Operation Supplies	36,281	38,101	40,000	40,000	40,000
Utilities	57,511	54,372	53,000	61,000	63,000
Meals and Payments	-	3,609	4,800	4,400	6,000
Communications	79,928	27,217	24,000	24,500	64,000
Software and Hardware	1,750	66,827	151,000	75,000	158,000
Supervision and Maintenance	618,832	-	101,000		100,000
Substation	109,084	219,685	123,900	70,000	119,900
Overhead Lines	418,792	160,495	175,800	70,000 175,800	181,000
Load and Dispatching	455,550	100,435	170,000	10,000	30,600
Storm Damage Contingency	118,025		50,000	450,000	100,000
Underground Lines	229,128	33,519	28,000	48,000	40,000
Customer Installations	21,334	33,013	20,000	40,000	40,000
		7 500	42.000		9 000
Electric Meters	76,602	7,509	12,000	6,000	8,000
Street Lighting	317,487	250,383	244,000	215,000	204,000
Traffic Signal Oper. & Maint.	122,135	4,120	17,000	5,000	10,000
Radio Equipment	5,627	10,390	2,500	3,500	5,000
Plant & Structures	249,074	68,965	85,000	87,000	96,700
Shop Labor	152,496	04.005	45.000	- 04 500	-
Safety	79,753	34,205	45,000	34,500	38,000
Tools	14,242	13,599	20,000	35,000	20,000
Uniforms	27.004	18,318	16,150	29,750	23,000
Professional and Contractual	37,064	122,274	95,800	167,000	93,500
Rent Expense	1,536	1,688	2,000	1,700	2,000
Professional Development	138,936	35,788	66,000	55,000	60,000
Printing and Publishing	1,301	2,601	3,000	3,500	3,500
Transportation	-	29,496	35,000	26,700	29,000
Vehicle Rentals	-	11,036	21,000	28,500	28,900
Miscellaneous	332	539	500	500	500
Inventory Adjustments	8,548	12,687	5,000	10,000	10,000
Total Distribution O & M	3,355,752	3,530,929	3,976,150	4,011,750	3,886,250
TRANSMISSION OPERATIONS & MA	AINTENANCE:				
Salaries and Wages		287,792	219,500	263,000	279,000
Fringe Benefits	-	952	3,800	4,000	4,000
Supervision & Maintenance	109,335			-	•
Substation	8,646	13,725	25,000	16,000	16,000
Overhead Lines	(1,007)	10,364	10,000	21,000	21,000
Load and Dispatching	84,001	· •	· -	-	-
MISO Transmission	25,425	24,481	27,500	33,000	36,000
Tools		-	3,500	3,500	3,000
Professional and Contractual	-	-	5,000	•	15,000
Vehicle Rentals	-	-	-	800	1,000
Miscellaneous-MPPA Transmission Pro	oject 73,049	69,270	65,000	60,000	62,000
Total Transmission O & M	299,449	406,584	359,300	401,300	437,000

	FY 13/14 Actual	FY 14/15 Actual	FY 15/16 Budget	FY 15/16 Projected	FY 16/17 Requested
METERING & CUSTOMER ACCOUNTING:					
Salaries and Wages	237,269	279,959	281,500	259,300	268,200
Fringe Benefits	132,343	162,424	123,000	131,150	134,700
Office Supplies	2,563	2,110	4,000	4,900	4,150
Communications	232	173	400	400	400
Meal Payments	90	20	200	200	200
Safety	570	2,979	3,200	3,500	3,500
Uniforms	588	1,638	3,600	3,500	3,000
Professional and Contractual	10,805	17,764	12,000	12,000	14,000
Postage	28,332	27,799	35,000	29,400	33,000
Uncollectable Accounts	29,816	37,912	10,000	38,000	38,000
Collection Costs	595	2,595	2,000	5,500	6,000
Data Processing	20,718	16,509	22,000	25,000	25,000
The commence of the commence o	3,722	3,055	4,200	6,800	8,500
Transportation	610	3,030	6,500	6,500	2,500
Professional Development Printing and Publishing		482		1,800	4,000
Vehicle Rentals	2,040		4,000		
	6,904	11,455	7,400	18,500	12,600
Miscellaneous	2,654	1,498	2,500	1,600	1,600
Total Customer Accounting	479,851	568,692	521,500	548,050	559,35
CONSERVATION & PUBLIC SERVICES:					
Salaries and Wages	-	39,575	53,000	31,900	15,10
Fringe Benefits	-	28,427	29,900	20,770	11,100
Professional and Contractual	2,120	25,000	30,000	41,000	6,500
Contract Labor - Energy Optimization		(65,443)	-	30,950	-
Public Service & Communications	12,597	12,439	44,000	27,000	30,800
Community Services	50,564	1,866	500	32,200	34,000
Professional Development	.=	102	5,000		3,000
Printing and Publishing	-	892		-	
Vehicle Rentals	-	7,419	7,500	3,700	5,000
PA295 Energy Optimization Compliance_	374,979	463,025	509,500	420,000	380,500
Total Conservation & Public Services _	440,260	513,302	679,400	607,520	486,000
ADMINISTRATIVE AND GENERAL:					
Salaries and Wages	294,004	362,235	367,300	374,250	521,000
Fringe Benefits	133,115	195,384	201,300	281,300	361,300
Office Supplies	11,177	5,207	9,000	5,200	5,200
Communications	12,636	5,030	3,500	3,200	3,500
Software and Hardware	-	16,350	22,200	15,000	22,500
Fees and Per Diem	64,362	57,668	67,000	65,000	66,300
Board Related Expenses	11,678	3,308	15,000	4,400	15,000
Professional & Contractual	141,522	101,647	106,300	106,300	83,300
Legal Services	53,312	49,631	60,000	56,000	63,200
Employee Appreciation	9,129	11,813	9,700	8,700	9,000
City Fee	1,775,851	1,863,259	1,801,000	1,790,000	1,870,000
			2,500	1,790,000	1,670,000
Transportation	1,846	1,267			
Professional Development	15,232	21,303	27,000	15,100	25,000
Printing & Publishing	4,798	3,436	6,000	4,000	6,000
Insurance and Bonds	59,502	57,875	63,000	63,000	65,500
Miscellaneous Depreciation Expense	337 2,027,184	659 2,157,940	5,000 2,150,000	7,000 2,300,000	5,000 2,525,000
Total Administrative and General	4,615,685	4,914,012	4,915,800	5,099,950	5,648,300
Total Administrative and Selicial	7,010,000	7,017,014	7,010,000	0,000,000	0,040,0

		FY 13/14 Actual	FY 14/15 Actual	FY 15/16 Budget		FY 15/16 Projected	FY 16/17 Requested
Total Operating Expenses		32,410,123	32,788,692	35,231,050	ć.	33,519,820	35,094,550
Operating Income	\$	2,882,003	\$ 4,354,897	\$ 697,650	\$	2,177,480	\$ 1,997,350
NON OPERATING REVENUES/(EXPENSES	<b>}</b> :						
Rents and Royalties	\$	47,282	\$ 49,046	\$ 44,350	\$	44,500	\$ 40,700
Pole Rentals		35,931	42,180	34,600		33,700	36,500
Reimbursements		616,140	143,048	102,800		204,000	72,000
Interest & Dividend Earnings		402,872	310,269	250,000		200,000	170,000
Gain/(Loss) on Sale of Fixed Assets		46,931	(428,620)	25,000		2,000	50,000
Total Non Operating Revenue/(Expenses		1,149,156	115,923	456,750		484,200	 369,200
Net Income before Transfers	\$	4,031,159	\$ 4,470,820	\$ 1,154,400	\$	2,661,680	\$ 2,366,550
OTHER FINANCING SOURCES:							
Operating Transfers In				•		175,000	175,000
Net Income	\$	4,031,159	\$ 4,470,820	\$ 1,154,400	\$	2,836,680	\$ 2,541,550

# Traverse City Light & Power

	Actual	Projected	Estimate	Estimate	Estimate	Estimate	Estimate
Fiscal Year:	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Receipts							
Charges for Services	34,396,799	31,775,100	33,887,000	34,564,740	35,256,035	35,961,155	36,680,379
Other Operating Revenues	2,746,790	3,922,200	3,204,900	3,268,998	3,334,378	3,401,066	3,469,087
Non Operating Revenues	544,543	484,200	369,200	376,584	384,116	391,798	399,634
Transfers in	-	175,000	175,000	175,000	150,000	150,000	150,000
Total Receipts	37,688,132	36,356,500	37,636,100	38,385,322	39,124,528	39,904,019	40,699,099
Payments							
Generation Expense	22,855,173	22,851,250	24,077,650	24,559,203	25,050,387	25,551,395	26,062,423
Distribution Expense	3,530,929	4,011,750	3,886,250	3,963,975	4,043,255	4,124,120	4,206,602
Transmission Expense	406,584	401,300	437,000	445,740	454,655	463,748	473,023
Metering & Customer Accounting	568,692	548,050	559,350	570,537	581,948	593,587	605,458
Conservation & Public Service	513,302	607,520	486,000	495,720	505,634	515,747	526,062
Administrative & General	834,938	946,950	1,187,800	1,211,556	1,235,787	1,260,503	1,285,713
Insurance	57,875	63,000	65,500	66,810	68,146	69,509	70,899
City Fee	1,863,259	1,790,000	1,870,000	1,907,400	1,945,548	1,984,459	2,024,148
GASB 68 Adjustment	(383,350)	(490,284)	775,330	790,837	806,654	822,787	839,242
Capital Investments	6,214,308	6,137,000	7,746,500	8,186,000	4,800,000	4,090,000	4,275,000
otal Payments	36,461,710	36,866,536	41,091,380	42,197,778	39,492,013	39,475,854	40,368,571
Cashflow Surplus/Deficit (-)	1,226,422	(510,036)	(3,455,280)	(3,812,456)	(367,485)	428,165	330,529
,		(523,626)	(5).55/255/	(0,000,000)	(		
Opening Cash & Investments Balance	21,091,983	22,318,405	21,808,369	18,353,089	14,540,633	14,173,148	14,601,313
Closing Cash & Investments Balance	22,318,405	21,808,369	18,353,089	14,540,633	14,173,148	14,601,313	14,931,842
Reserved Cash & Investment Balance	9,200,000	9,350,000	9,525,000	9,700,000	9,800,000	9,900,000	10,000,000
Unreserved & Undesginated Cash & Investment Balance	13,118,405	12,458,369	8,828,089	4,840,633	4,373,148	4,701,313	4,931,842

# **Notes and Assumptions**

Trust fund will be depleted at end of fiscal year and power cost recovery will increase revenues by \$1,000,000 in 2016-17

Load growth increase of .5% per year

General inflation increase of 2% year

Estimated increased in purchase power (generation cost) of 2% year and increase in charges for services at 1.5% to cover increase in generation costs through the power cost recovery rate

### TRAVERSE CITY LIGHT AND POWER BOARD

Minutes of Regular Meeting
Held at 5:15 p.m., Commission Chambers, Governmental Center
Tuesday, April 11, 2017

#### **Board Members -**

Present:

Jan Geht, Ross Hammersley, Pat McGuire, Jeff Palisin, Amy Shamroe,

Tim Werner

Absent:

John Taylor

#### Ex Officio Member -

Present:

Marty Colburn, City Manager

Others:

Tim Arends, W. Peter Doren, Matt Nordfjord, Scott Menhart, Karla

Myers-Beman, Kelli Schroeder, Mark Watson, Tony Chartrand, Jennifer J.

St. Amour

The meeting was called to order at 5:15 p.m. by Secretary Arends.

Secretary Tim Arends opened the floor to nominations for Chairperson of the Light and Power Board:

McGuire nominated Jan Geht, Werner seconded.

Tim Arends closed the floor to nominations.

CARRIED unanimously. (Taylor absent)

Tim Arends turned the meeting over to Chairman Geht.

Chairman Geht opened the floor to nominations for Vice Chairperson of the Light and Power Board:

McGuire nominated Jeff Palisin, Werner seconded.

Chairman Geht closed the floor to nominations.

CARRIED unanimously. (Taylor absent)

Chairman Geht recommended Tim Arends be reappointed Secretary for the Light and Power Board. Consensus of the Board that Tim Arends be reappointed Secretary for the Light and Power Board.

2

McGuire, Palisin, and Shamroe volunteered, with Taylor as the alternate.

CARRIED unanimously. (Taylor absent)

Tim Arends requested item 2e and item 6b (3) be removed from the Agenda.

Tim Werner requested item 2g be removed from the Consent Calendar for further discussion.

#### Item 2 on the Agenda being Consent Calendar

Moved by McGuire, seconded by Shamroe, that the following actions, as recommended on the Consent Calendar portion of the Agenda, as amended, be approved:

- a. Minutes of the Regular Meeting of March 14, 2017.
- b. Approval of the Electric Utility 2017-18 Operating Budget.
- c. Approval of the Fiber 2017-18 Operating Budget.
- d. Approval of the IBM Operating Agreement.
- e. Removed by the Executive Director.
- f. Approval to amend Board Rule No. 1- Regular Meetings.
- g. Removed from the Consent Calendar for further discussion.
- h. Approving the Grand Traverse Substation O&M Agreement.
- i. Tenant request to waive rent escalator.

CARRIED unanimously as amended. (Taylor absent)

#### Items Removed from the Consent Calendar

a. Approval of a Pole Attachment License Agreement with Michigan Broadband Services.

The following individuals addressed the Board:

Tim Arends, Executive Director Karla Myers-Beman, Controller

Moved by Werner, seconded by Shamroe, that the Board authorizes the Secretary and Chairman to execute a Pole Attachment Agreement with Michigan Broadband Services for the installation of fiber on Traverse City Light & Power poles per the requirements of the agreement as presented, subject to approval as to substance by the Executive Director and as to form by General Counsel.

CARRIED unanimously. (Taylor absent)

None.

## **Item 4 on the Agenda being New Business**

 a. Consideration of a Project Authorization Request for removal and transfer of Hickory Meadows Distribution Line to Randolph Street.

The following individuals addressed the Board:

Tim Arends, Executive Director

Moved by McGuire, seconded by Hammersley, that the Board authorizes the Staff to proceed with the removal and transfer of Hickory Meadows Distribution Line to Randolph St. and seek the necessary Board approval for expenditures.

CARRIED unanimously. (Taylor absent)

 Consideration of approving a Purchase Order for wire relating to the Costco Line Improvement Project.

The following individuals addressed the Board:

Tony Chartrand, System Engineer/Key Accounts

Moved by Shamroe, seconded by McGuire, that the Board authorizes the Executive Director to issue a Purchase Order to Power Line Supply in the amount of \$78,965.25, more or less, for wire for the Costco Project.

CARRIED unanimously. (Taylor absent)

c. Discussion of TCL&P Collective Bargaining negotiations strategy.

The following individuals addressed the Board:

Tim Arends, Executive Director Pete Doren, General Counsel Matt Nordfjord, Shareholder, Cohl. Stoker & Toskey, PC

Moved by McGuire, seconded by Shamroe, that the Board enter into closed session following public comment to consider the strategy and negotiation of the Collective Bargaining Agreement between TCL&P Board and the Utility Workers Union of America, AFL-CIO, Local No. 25, and to adjourn immediately thereafter.

#### Roll Call:

Yes- McGuire, Hammersley, Palisin, Shamroe, Werner, Geht

CARRIED.

#### Item 5 on the Agenda being Appointments

None.

#### Item 6 on the Agenda being Reports and Communications

a. From Legal Counsel.

Pete Doren reported on Michigan Legislature – House Bill 4220

The following individuals addressed the Board:

Tim Arends, Executive Director Marty Colburn, City Manager

- b. From Staff.
  - 1. Presentation of LaFranier/Barlow Transmission Line Upgrade Project close-out report.

The following individuals addressed the Board:

Karla Myers-Beman, Controller

2. Presentation of MPPA's Report Card on TCL&P.

The following individuals addressed the Board:

Karla Myers-Beman, Controller

3. Energy efficiency staffing plan.

Removed from the Agenda by Executive Director.

4. Fiber to The Home project update- Next steps.

The following individuals addressed the Board:

Scott Menhart, Manager of Telecom & Technology Tim Arends, Executive Director

5. Presentation of options for 1MW solar installation within TCL&P's service territory.

The following individuals addressed the Board:

Tim Arends, Executive Director Karla Myers-Beman, Controller Marty Lagina, Founder & Chief Executive, Heritage Sustainable Energy, LLC Amy Shamroe reminded the Board that it was the TCL&P Annual Seedling Giveaway beginning April 17, 2017

Marty Colburn reported that he, TCL&P employee Rod Solak, TC Fire Chief Tuller, and TC Fire Captain Mueller were attending a class funded by FEMA for Utility Distribution Systems.

# Item 7 on the Agenda being Public Comment

a. General

No one from the public commented.

7:26 the Board entered into closed session.

Tim Arends, Secretary

LIGHT AND POWER BOARD

#### A REGULAR MEETING

Of The

#### TRAVERSE CITY LIGHT AND POWER BOARD

Will Be Held On

TUESDAY, April 11, 2017

At

5:15 p.m.

In The

#### **COMMISSION CHAMBERS**

(2<sup>nd</sup> floor, Governmental Center) 400 Boardman Avenue

Traverse City Light and Power will provide necessary reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting, to individuals with disabilities at the meeting/hearing upon notice to Traverse City Light and Power. Individuals with disabilities requiring auxiliary aids or services should contact the Light and Power Department by writing or calling the following.

> Jennifer J. St. Amour Administrative Assistant 1131 Hastings Street Traverse City, MI 49686 (231) 922-4940 ext. 201

Traverse City Light and Power 1131 Hastings Street Traverse City, MI 49686 (231) 922-4940

Posting Date: April 7, 2017

3:00 p.m.

#### **AGENDA**

# Pledge of Allegiance

#### 1. Roll Call

Organizational Meeting. (p.4)

#### 2. Consent Calendar

The purpose of the consent calendar is to expedite business by grouping non-controversial items together to be dealt with by one Board motion without discussion. Any member of the Board, staff or the public may ask that any item on the consent calendar be removed therefrom and placed elsewhere on the agenda for full discussion. Such requests will be automatically respected. If an item is not removed from the consent calendar, the action noted in parentheses on the agenda is approved by a single Board action adopting the consent calendar.

- a. Consideration of approving the minutes of the Regular Meeting of March 14, 2017. (Approval recommended) (p.8)
- b. Consideration of approval of the Electric Utility 2017-18 Operating Budget. (Approval recommended) (Myers-Beman) (p.12)
- c. Consideration of approval of the Fiber 2017-18 Operating Budget. (Approval recommended) (Myers-Beman) (p.20)
- d. Consideration of approving the IBM Operating Agreement. (Approval recommended) (Menhart) (p.22)
- e. Consideration of approval of 60 month Lease Agreement with Third Coast Bakery, LLC. (Approval recommended) (Arends) (p.33)
- f. Consideration of approval to amend Board Rule No.1 Regular Meetings. (Approval recommended) (Arends) (p.40)
- g. Consideration of approval of a Pole Attachment License Agreement with Michigan Broadband Services. (Approval recommended) (Arends) (p.42)
- h. Consideration of approving the Grand Traverse Substation O&M Agreement. (Approval recommended) (Schimpke) (p.69)
- i. Consideration of tenant request to waive rent escalator. (Approval recommended) (Arends) (p.79)

## **Items Removed From Consent Calendar**

a.

#### 3. Unfinished Business

None.

## 4. New Business

a. Consideration of a Project Authorization Request for removal and transfer of Hickory Meadows Distribution Line to Randolph Street. (Arends/Schimpke) (p.81)

3

- b. Consideration of approving a Purchase Order for wire relating to the Costco Line Improvement Project. (Chartrand/Schimpke) (p.84)
- c. Discussion of TCL&P Collective Bargaining negotiations strategy. (Possible closed session) (4 votes required) (Arends/Schroeder) (p.85)

## 5. Appointments

None.

# 6. Reports and Communications

a. From Legal Counsel.

From Staff.

- 1. Presentation of LaFranier/Barlow Transmission Line Upgrade Project closeout report. (Myers-Beman/Schimpke) (p.86)
- 2. Presentation of MPPA's Report Card on TCL&P. (Myers-Beman) (p.88)
- 3. Energy efficiency staffing plan (Arends/Schroeder/Schimpke) (p.89)
- 4. Fiber To The Home project update Next steps (Arends/Menhart) (p.90)
- 5. Presentation of options for a 1MW solar installation within TCL&P's service territory. (Arends) (p.92)

From Board.

# 7. Public Comment

/js

# TRAVERSE CITY LIGHT AND POWER BOARD

Minutes of Regular Meeting Held at 5:15 p.m., Commission Chambers, Governmental Center Tuesday, March14, 2017

#### **Board Members -**

Present:

Jan Geht, Pat McGuire, Jeff Palisin, Amy Shamroe,

Bob Spence, John Taylor, Tim Werner

Absent:

#### Ex Officio Member -

Present:

Marty Colburn, City Manager

Others:

Tim Arends, Karla Myers-Beman, Kelli Schroeder, Pete Schimpke, Scott

Menhart, Tony Chartrand, Jennifer St. Amour

The meeting was called to order at 5:15 p.m. by Chairman Geht.

# Item 2 on the Agenda being Consent Calendar

Moved by McGuire, seconded by Shamroe, that the following actions, as recommended on the Consent Calendar portion of the Agenda, be approved:

- a. Minutes of the Regular Meeting of February 14, 2017.
- b. Conceptual approval of 60 month Lease Agreement with Third Coast Bakery, LLC.
- c. Approving an Organizational Chart.

# CARRIED unanimously.

Tim Arends requested Fiber to the Premise Next Steps memo be added to Staff Reports. Consensus of the Board to add Fiber to the Premise Next Steps memo to the next meeting Agenda.

## Items Removed from the Consent Calendar

None.

# Item 3 on the Agenda being Unfinished Business

a. Consideration of an Amended Six Year Capital Improvements Plan – 2017.

The following individuals addressed the Board:

Pete Schimpke, Manager of Operations & Engineering Tim Arends, Executive Director

Moved by Werner, seconded by Shamroe, that the Board authorizes an amendment to the Six Year Capital Plan to delay certain Capital Projects in the amount of \$1,515,000 from 2017/18 to

2018/19 and move from 2018/19 to 2017/18 the replacement of both Barlow Substation transformers in the amount of \$1,500,000.

## CARRIED unanimously.

- b. Consideration of Awarding Bids for BW-31 Rebuild.
  - 1. BW-31 Distribution Rebuild Project: Construction Bids.

The following individuals addressed the Board:

Pete Schimpke, Manager of Operations & Engineering Michael P. McGeehan, President, GRP Engineering, Inc. Tim Arends, Executive Director

Moved by Taylor, seconded by Shamroe, that the Board authorizes the Chairman and Secretary to execute a Construction Agreement in the amount of \$1,195,166.50 with C.C. Power, LLC for the BW-31 Distribution Line Rebuild Project; subject to approval as to substance by the Executive Director and as to form by General Counsel; and further authorizes the Executive Director to approve change orders in the best interest of the utility.

# CARRIED unanimously.

2. BW-31 Distribution Rebuild Project: Conductor & Material Bids

Moved by Spence, seconded by McGuire, that the Board authorizes the Executive Director to issue a purchase order to Power Line Supply in the amount of \$202,077.95 for conductor and material for the BW-31 Distribution Line Rebuild Project.

## CARRIED unanimously,

3. BW-31 Distribution Rebuild Project: Wood Pole Bids.

Moved by Shamroe, seconded by McGuire, that the Board authorizes the Executive Director to issue a purchase order to Thomasson Company in the amount of \$98,586.50 for wood distribution poles for the BW-31 Distribution Line Rebuild Project.

#### CARRIED unanimously.

## Item 4 on the Agenda being New Business

a. Consideration of Amending Board Rule No. 1-Regular Meetings.

The following individuals addressed the Board:

Tim Arends, Executive Director

Moved by Spence, seconded by Shamroe, that the Board authorizes the amendment of Board Rule #1 – Regular Meetings to read, "Regular Meetings of the Light and Power Board shall be held on the second Tuesday of every month with the fourth Tuesday of every month reserved for potential Special Meetings at 5:15 P.M. in the Commission Chambers of the Governmental Center, 400 Boardman Avenue, Traverse City", effective immediately.

## CARRIED unanimously.

Chairman Geht recognized Board Member Bob Spence for his years of service on the Light & Power Board.

Tim Arends recognized Board Member Bob Spence for his service, knowledge, and construction background.

# Item 5 on the Agenda being Appointments

None.

# Item 6 on the Agenda being Reports and Communications

- a. From Legal Counsel.
- b. From Staff.
  - 1. Franklin Energy Proposal.

The following individuals addressed the Board:

Tim Arends, Executive Director Jacob Hardy, Energy Advisor, Franklin Energy Kevin Salatrik, Program Manager, Franklin Energy

Amy Shamroe left the meeting at 6:34 p.m.

2. Karla Myers-Beman presented the Electric and Fiber Fund Budgets.

The following individuals addressed the Board:

Tim Arends, Executive Director

3. Karla Myers-Beman presented the Rate Study.

The following individuals addressed the Board:

Tim Arends, Executive Director

4. December 31, 2016 Financial Statements.

The following individuals addressed the Board:

Karla Myers-Beman, Controller

## c. From Board.

Chairman Geht discussed the process for the Executive Director annual review.

Marty Colburn reported that they are getting close on final cost estimates for the West Front Street Project.

Marty Colburn indicated that Traverse City made the final four in the Strongest Town Contest.

# Item 7 on the Agenda being Public Comment

There being no objection, Chairman Geht declared the meeting adjourned at 7:01 p.m.

/js

Tim Arends, Secretary LIGHT AND POWER BOARD

# FOR THE LIGHT & POWER BOARD MEETING OF APRIL 11, 2017



To:

Light & Power Board

From:

Karla Myers-Beman, Controller

Date:

April 5, 2017

Subject:

Electric Fund Budget

In accordance with City Charter Chapter XVIII, section 179 (o), the 2017-18 Electric Fund Operating Budget must be submitted to the City Commission by its last meeting in April.

The Electric Fund was reviewed by the Board at the last meeting, March 14, 2017 and no changes have been made since the initial presentation. The budget is attached for your reference.

Included with the adoption of the budget staff understands the Board would like to continue with the ten-year amortization, which is now the nine-year amortization based on the market value of assets option for contributions into the Municipal Employees' Retirement System ("MERS"). This selection does not directly affect the income statement, but rather the Utility's cash flow statement. Additionally, this will be brought to the Board during the budget process on an annual basis going forward.

Staff recommends that the Board approve submittal of the 2017-18 Electric Fund Budget to the City Commission for its consideration.

This item is appearing on the Consent Calendar as it is deemed by staff to be a non-controversial item. Approval of this item on the Consent Calendar means you agree with staff's recommendation.

If any member of the Board or the public wishes to discuss this matter, other than clarifying questions, it should be placed on the "Items Removed from the Consent Calendar" portion of the agenda for full discussion.

If after Board discussion you agree with staff's recommendation the following motion would be appropriate:

#### MOTION ON NEXT PAGE

# FOR THE LIGHT & POWER BOARD MEETING OF APRIL 11, 2017

MOVED BY \_\_\_\_\_, SECONDED BY \_\_\_\_\_, THAT THE

LIGHT & POWER BOARD APPROVES SUBMITTAL OF THE 2017-18 ELECTRIC

FUND OPERATING BUDGET AS PRESENTED TO THE CITY COMMISSION FOR

ITS CONSIDERATION. IN ADDITION, THE BOARD DIRECTS STAFF TO

CONTRIBUTE INTO THE RETIREMENT SYSTEM BASED ON THE NINE YEAR

AMORTIZATION CALCULATED ON THE MARKET VALUE OF ASSETS OPTION

PROVIDED BY MERS.

# City of Traverse City, Michigan TRAVERSE CITY LIGHT & POWER DEPARTMENT 2017-18 Budgeted Revenues and Expenses Summary

	FY 14/15 Actual	FY 15/16 Actual		FY 16/17 Budget	FY 16/17 Projected	Re	FY 17/18 commended
Operating Income:	\$ 37,143,589	\$ 35,530,044	\$	37,091,900	\$ 34,536,200	\$	36,065,200
Operating Expenses:							
Generation Expenses:			H 12274 1227				
Capacity	\$ 12,000	\$ 465,421	\$	745,000	\$ 733,000	\$	810,000
Purchased Power - MISO	(358,421)	3,766,366		1,401,000	740,000		2,640,000
Purchased Power - Lansing BWL	5,675,258	2,898,085	DINZAROS	-	-,		
Stoney Corners - Wind Energy	2,819,687	2,940,041		3,170,000	3,025,000		3,170,000
Combustion Turbine Power Cost	3,364,832	3,338,292		4,272,000	4,375,000		4,500,000
Campbell #3 Power Cost	4,850,934	3,793,717		4,412,000	4,075,000		4,522,500
Belle River #1 Power Cost	5,349,402	3,749,902		4,187,000	4,050,000		3,800,000
Landfill Gas - Granger Project	494,766	567,834		1,118,000	900,000		980,000
M-72 Wind Turbine	8,890	35,056		37,000	47,500		48,000
Bilateral Contracts	292,322	1,100,866		4,286,000	4,350,000		3,300,000
Other Generation Expenses	345,503	414,424		449,650	491,250		329,050
Total Generation Expenses	22,855,173	23,070,004		24,077,650	22,786,750		24,099,550
Distribution Expenses:							
Operations & Maintenance	3,530,929	4,424,951		3,886,250	3,821,100		4,261,500
Transmission Expenses:							
Operations & Maintenance	406,584	421,135		437,000	504,900		525,100
Other Operating Expenses:							
Metering & Customer Accounting	568,692	577,278		559,350	562,000		561,550
Conservation & Public Services	513,302	671,545		486,000	564,500		593,000
Administrative & General	834,938	986,037		1,187,800	1,295,300		1,276,100
Insurance	57,875	62,001		65,500	68,000		70,720
Depreciation Expense	2,157,940	2,254,188		2,525,000	2,525,000		2,605,000
City Fee	1,863,259	1,784,900	9	1,870,000	1,739,000		1,820,000
<b>Total Other Operating Expenses</b>	5,996,006	6,335,949		6,693,650	6,753,800		6,926,370
Total Operating Expenses	32,788,692	34,252,039		35,094,550	33,866,550		35,812,520
Operating Income	\$ 4,354,897	\$ 1,278,005	\$	1,997,350	\$ 669,650	\$	252,680
Non Operating Revenues/(Expenses):			THE RESIDENCE OF THE PARTY OF T				
Non Operating Revenues	544,543	737,684		369,200	613,000		555,800
Non Operating Expenses	(428,620)	(355,965)		150000200000000000000000000000000000000	1007/100/99 <b>&gt;</b> 94 90 92/74	H .	3.5
Total Non Operating Revenue	115,923	381,719	THE CHARLES OF THE PARTY OF THE	369,200	613,000		555,800
OTHER FINANCING SOURCES:				March 12/2/27			
Transfers in		175,000		175,000	125,000	1	125,000
Change in Net Position	\$ 4,470,820	\$ 1,834,724	\$	2,541,550	\$ 1,407,650	\$	933,480

	FY 14/15 Actual	FY 15/16 Actual	FY 16/17 Budget	FY 16/17 Projected	FY 17/18 Recommended
OPERATING REVENUES:		5			14 A 14 A 14 A 14 A 14 A 14 A 14 A 14 A
Residential Sales	\$ 6,612,011	\$ 6,090,231	\$ 6,375,000	\$ 6,130,000	\$ 6,400,000
Commercial Sales	16,392,293	15,348,675	16,150,000	14,900,000	15,560,000
Industrial Sales	10,788,926	9,615,567	10,770,000	9,500,000	10,050,000
Public Authority Sales	317,521	309,162	315,000	300,000	300,000
Street Lighting Sales	199,517	203,949	195,000	200,000	225,000
Yard Light Sales	86,531	98,529	82,000	115,000	155,000
Total Utility Sales	34,396,799	31,666,113	33,887,000	31,145,000	32,690,00
Forfeited Discounts	73,522	60,777	70,000	60,000	60,000
Merchandise and Jobbing	115,918	231,826	64,200	81,000	70,000
Recovery of Bad Debts	30	26	200	200	200
Sale of Scrap	30,804	41,792	35,000	40,000	35,000
Miscellaneous Income	42,535	41,663	33,000	39,500	39,500
Refunds and Rebates	2,481	4,795	2,500	500	500
	2,481,500	3,483,052	3,000,000	3,170,000	3,170,000
MISO Revenue				<b>2</b> 20	\$ 36,065,200
TOTAL OPERATING REVENUES	\$ 37,143,589	\$ 35,530,044	\$ 37,091,900	\$ 34,536,200	\$ 30,003,200
OPERATING EXPENSES:					F1 (4) (4) (4) (4) (4) (4) (4) (4) (4) (4)
GENERATION-OPERATING & MAINTENANCE:	404005	¢ 400.404	¢ 450.400	e 420.200	¢ 62.000
Salaries and Wages	\$ 104,905		\$ 152,100		\$ 62,000
Fringe Benefits	96,876	192,648	148,800	239,200	142,700
Wind Generation - Traverse	60	-	-	N#	
Trap and Transfer	95	<b>(■</b> ))	250	250	250
Union Street Fish Ladder	. <del></del> 0:		250	250	250
Kalkaska Combustion Turbine			j e	\\ <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	
Operation Supplies	470	-	1,000	(-	1,000
Capacity Purchases	12,000	465,421	745,000	733,000	810,000
Purchased Power - MISO	(358,421)	3,766,366	1,401,000	740,000	2,640,000
Purchased Power - LBWL	5,675,258	2,898,085	2 2 2 2 2 2	(i=	
Stoney Corners - Wind Energy	2,819,687	2,940,041	3,170,000	3,025,000	3,170,000
Combustion Turbine Power Cost	3,364,832	3,338,292	4,272,000	4,375,000	4,500,000
Campbell #3 Power Cost	4,850,934	3,793,717	4,412,000	4,075,000	4,522,500
Belle River #1 Power Cost	5,349,402	3,749,902	4,187,000	4,050,000	3,800,000
Landfill Gas - NANR & Granger Project	494,766	567,834	1,118,000	900,000	980,000
M72 Wind Turbine	8,890	35,056	37,000	47,500	48,000
Bilateral Contracts	292,322	1,100,866	4,286,000	4,350,000	3,300,000
Total Purchased Power	22,509,670	22,655,580	23,628,000	22,295,500	23,770,50
Puchased Power Cost as % of Sales	65.44%	71.55%	69.73%		72.71
Coal Dock	9,367	2,842	-		
Communications	1,084	170	250	250	250
Meal Payments	80		200		200
Safety	2,201	2,994	3,500	3,500	3,500
	2,201	2,004	500	500	500
Tools	113,124	85,029	110,000	86,200	96,000
Professional and Contractual	9,618	6,316	9,800	7,000	7,000
Transportation	9,018	0,310		500	50
Professional Development	0.450	2.450	2,000	4,500	3,500
Uniforms	2,156	3,456	3,500		11,400
Vehicle Rentals Miscellaneous	8,243 (2,776)	(3,308) 1,153	17,500 -	12,800 -	11,40
Total Generation O & M	22,855,173	23,070,004	24,077,650	22,786,750	24,099,550
DISTRIBUTION OPERATION & MAINTENANCE:					
Salaries and Wages	1,223,372	1,226,717	1,247,000	1,044,000	1,213,000
Fringe Benefits	1,077,958	1,611,956	1,200,650	1,560,600	1,616,000
i inigo Dononto	.,,	., , ,	4,000	,,	11

	FY 14/15 Actual	FY 15/16 Actual	FY 16/17 Budget	FY 16/17 Projected	FY 17/18 Recommende
Operation Supplies	38,101	51,121	40,000	40,000	40,000
Utilities	54,372	44,244	63,000	50,400	51,00
Meals and Payments	3,609	3,231	6,000	3,500	5,00
Communications	27,217	33,987	64,000	22,200	61,500
Software and Hardware	66,827	74,618	158,000	146,500	191,40
Substation	219,685	70,618	119,900	72,300	120,000
Overhead Lines	160,495	170,363	181,000	202,000	205,000
Load and Dispatching		25,000	30,600	31,500	31,50
Storm Damage Contingency	<u>22</u>	448,383	100,000		50,00
Underground Lines	33,519	97,922	40,000	30,000	30,00
Electric Meters	7,509	2,624	8,000	4,000	6,00
Street Lighting	250,383	217,587	204,000	210,000	230,00
Traffic Signal Oper. & Maint.	4,120	1,767	10,000	5,000	5,00
Radio Equipment	10,390	3,244	5,000	5,000	5,00
Plant & Structures	68,965	94,302	96,700	81,000	82,00
Safety	34,205	27,538	38,000	38,000	38,00
Tools	13,599	14,969	20,000	16,000	31,00
Uniforms	18,318	22,218	23,000	25,000	25,00
Professional and Contractual	122,274	139,050	93,500	90,000	94,00
Rent Expense	1,688	1,757	2,000	2,000	2,00
Professional Development	35,788	28,861	60,000	52,000	65,00
Printing and Publishing	2,601	4,110	3,500	4,000	4,00
Transportation	29,496	23,796	29,000	25,000	28,00
Vehicle Rentals	11,036	(23,539)	28,900	4,600	16,60
Miscellaneous	539	1,673	500	1,500	1,50
Inventory Adjustments	12,687	3,674	10,000	50,000	10,00
Total Distribution O & M	3,530,929	4,424,951	3,886,250	3,821,100	4,261,50
RANSMISSION OPERATIONS & MAINTENAN	CE:	5			700 100 100 100 100 100 100 100 100 100
Salaries and Wages	287,792	232,813	279,000	287,000	294,10
Fringe Benefits	952	409	4,000	3,500	3,50
Substation	13,725	14,496	16,000	47,500	50,00
Overhead Lines	10,364	76,567	21,000	23,000	23,00
Load and Dispatching	20	- 5	5540 56	13,500	13,50
MISO Transmission	24,481	32,494	36,000	35,000	36,00
Tools	-		3,000	1,000	9,00
Professional and Contractual	=		15,000	15,000	15,00
Vehicle Rentals	<u> </u>	223	1,000	3,000	3,00
Miscellaneous-MPPA Transmission Project	69,270	64,133	62,000	76,400	78,00
Total Transmission O & M	406,584	421,135	437,000	504,900	525,10
IETERING & CUSTOMER ACCOUNTING:		ALI CAPE			
Salaries and Wages	279,959	273,710	268,200	274,200	263,70
Fringe Benefits	162,424	190,106	134,700	169,450	164,60
Office Supplies	2,110	3,610	4,150	4,200	4,20
Communications	173	110	400	250	25
Hardware/Software		22		500	8,00
Meal Payments	20		200	200	20
Safety	2,979	4,990	3,500	3,500	3,50
Uniforms	1,638	1,826	3,000	3,000	3,00
Professional and Contractual	17,764	23,893	14,000	12,000	13,00
Postage	27,799	28,185	33,000	30,000	33,00
Uncollectable Accounts	37,912	1,739	38,000	10,000	10,00
Collection Costs	2,595	4,118	6,000	5,000	5,00
Data Processing Transportation	16,509 3,055	20,197 2,344	25,000 8,500	25,000 4,500	25,00 4,50

	FY 14/15 Actual	FY 15/16 Actual	FY 16/17 Budget	FY 16/17 Projected	FY 17/18 Recommended
Printing and Publishing	482	684	4,000	3,500	4,000
Vehicle Rentals	11,455	19,666	12,600	12,600	14,000
Miscellaneous	1,498	954	1,600	600	600
Total Customer Accounting	568,692	577,278	559,350	562,000	561,550
CONSERVATION & PUBLIC SERVICES:					in the second
Salaries and Wages	39,575	22,481	15,100	13,300	13,300
Fringe Benefits	28,427	34,637	11,100	9,700	9,700
Professional and Contractual	25,000	4,011	6,500	22,000	1,500
Contract Labor - Energy Optimization	(65,443)			-	-
Public Service & Communications	12,439	32,653	30,800	21,000	22,000
Community Services	1,866	32,240	34,000	33,000	35,000
Professional Development	102	-	3,000	-	
Printing and Publishing	892	-	-,	-	1
Vehicle Rentals	7,419	3,943	5,000	6,500	6,500
PA295 Energy Optimization Compliance	463,025	510,632	380,500	459,000	505,000
Total Conservation & Public Services	513,302	671,545	486,000	564,500	593,000
ADMINISTRATIVE AND GENERAL:					
Salaries and Wages	362,235	386,497	521,000	500,300	515,700
Fringe Benefits	195,384	322,167	361,300	513,800	474,100
	5,207	5,973	5,200	6,000	6,000
Office Supplies	5,030	3,909	3,500	4,400	4,400
Communications Software and Hardware	16,350	18,579	22,500	12,200	15,000
				68,000	70,000
Fees and Per Diem	57,668	67,613	66,300		
Board Related Expenses	3,308	3,872	15,000	15,000	15,000 67,400
Professional & Contractual	101,647	82,759	83,300	77,100	
Legal Services	49,631	57,950	63,200	58,000	65,000
Employee Appreciation	11,813	7,073	9,000	7,000	7,000
City Fee	1,863,259	1,784,900	1,870,000	1,739,000	1,820,000
Transportation	1,267	619	1,500	1,500	1,500
Professional Development	21,303	15,985	25,000	22,000	25,000
Printing & Publishing	3,436	4,682	6,000	5,000	5,000
Insurance and Bonds	57,875	62,001	65,500	68,000	70,720
Miscellaneous	659	8,359	5,000	5,000	5,000
Depreciation Expense	2,157,940	2,254,188	2,525,000	2,525,000	2,605,000
Total Administrative and General	4,914,012	5,087,126	5,648,300	5,627,300	5,771,820
Total Operating Expenses	32,788,692	34,252,039	35,094,550	33,866,550	35,812,520
Operating Income	\$ 4,354,897	\$ 1,278,005	\$ 1,997,350	\$ 669,650	\$ 252,680
NON OPERATING REVENUES/(EXPENSES):					
Rents and Royalties	\$ 49,046	\$ 44,387	\$ 40,700	\$ 40,000	\$ 46,500
Pole Rentals	42,180	48,860	36,500	68,000	68,000
Reimbursements	143,048	296,244	72,000	147,000	91,300
Interest & Dividend Earnings	310,269	348,193	170,000	350,000	350,000
Gain/(Loss) on Sale of Fixed Assets	(428,620)	(355,965)	50,000	8,000	-
Total Non Operating Revenue/(Expenses)	115,923	381,719	369,200	613,000	555,800
Change in Net Position before Transfers	\$ 4,470,820	\$ 1,659,724	\$ 2,366,550	\$ 1,282,650	\$ 808,480

	FY 1 Act	ENDING THE STATE OF THE STATE O	FY 15/16 Actual	225000	Y 16/17 Budget	FY 16/17 Projected		FY 17/18 commended
OTHER FINANCING SOURCES: Operating Transfers In			175,000		175,000	125,000	Atheres serves synthe	125,000
Change in Net Position	\$ 4,4	70,820	1,834,724	\$	2,541,550	\$ 1,407,650	\$	933,480

Cash Flow Forecast								
Cash Flow Forecast	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate
Fiscal Year:	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Receipts								
Charges for Services	31,666,113	31,145,000	32,690,000	34,324,500	35,010,990	36,761,540	37,496,770	39,371,609
Other Operating Revenues	3,863,931	3,391,200	3,375,200	3,442,704	3,511,558	3,581,789	3,653,425	3,726,494
Non Operating Revenues	630,842	613,000	555,800	566,916	578,254	589,819	601,616	613,648
Transfers in	175,000	125,000	125,000	125,000	100,000	100,000	100,000	100,000
Total Receipts	36,335,886	35,274,200	36,746,000	38,459,120	39,200,802	41,033,148	41,851,811	43,811,750
Payments								
Generation Expense	23,069,158	22,786,750	24,099,550	24,581,541	25,073,172	25,574,635	26,086,128	26,607,851
Distribution Expense	4,387,363	3,821,100	4,261,500	4,346,730	4,433,665	4,522,338	4,612,785	4,705,040
Transmission Expense	451,739	504,900	525,100	535,602	546,314	557,240	568,385	579,753
Metering & Customer Accounting	560,770	562,000	561,550	472,781	482,237	491,881	501,719	511,753
Conservation & Public Service	671,545	564,500	593,000	604,860	616,957	629,296	641,882	654,720
Administrative & General	985,174	1,295,300	1,276,100	1,301,622	1,327,654	1,354,208	1,381,292	1,408,918
Insurance	62,001	68,000	70,720	72,134	73,577	75,049	76,550	78,081
City Fee	1,784,900	1,739,000	1,820,000	1,856,400	1,893,528	1,931,399	1,970,027	2,009,427
GASB 68 Adjustment	(1,096,888)	(181,426)	161,522	164,752	168,047	171,408	174,837	178,333
Capital Investments	8,407,374	5,695,500	6,733,196	5,640,591	5,766,591	6,221,591	5,193,591	4,811,591
Total Payments	39,283,136	36,855,624	40,102,238	39,577,014	40,381,742	41,529,045	41,207,194	41,545,466
Cashflow Surplus/Deficit (-)	(2,947,250)	(1,581,424)	(3,356,238)	(1,117,894)	(1,180,940)	(495,897)	644,617	2,266,284
								· · · · · · · · · · · · · · · · · · ·
Opening Cash & Investments Balance	22,318,405	19,371,155	17,789,731	14,433,493	13,315,599	12,134,659	11,638,762	12,283,379
Closing Cash & Investments Balance	19,371,155	17,789,731	14,433,493	13,315,599	12,134,659	11,638,762	12,283,379	14,549,663
8								
Reserved Cash & Investment Balance	9,350,000	9,405,000	9,700,000	9,800,000	9,900,000	10,000,000	10,400,000	10,550,000
Unreserved & Undesginated Cash & Investment	10,021,155	8,384,731	4,733,493	3,515,599	2,234,659	1,638,762	1,883,379	3,999,663

- Notes and Assumptions
  1) Includes MERS 9 year amortization funding schedule
  2) 3% rate increase in 2018/19, 2020/21, and 2022/23

#### TRAVERSE CITY LIGHT AND POWER BOARD

Minutes of Regular Meeting Held at 5:15 p.m., 1131 Hastings Street Tuesday, April 10, 2018

#### **Board Members -**

Present:

Jan Geht, Ross Hammersley, Pat McGuire, Amy Shamroe, Tim Werner,

John Taylor

Absent:

Elysha Davila

#### Ex Officio Member -

Present:

Marty Colburn, City Manager

Others:

Tim Arends, Daren Dixon, Scott Menhart, Karla Myers-Beman, Kelli Schroeder, Mark Watson, Tony Chartrand, Jacob Hardy, Jennifer J. St.

Amour

#### ORGANIZATIONAL MEETING

The meeting was called to order at 5:15 p.m. by Secretary Arends.

Secretary Tim Arends opened the floor to nominations for Chairperson of the Light and Power Board:

Geht nominated Pat McGuire, Shamroe seconded.

Tim Arends closed the floor to nominations.

CARRIED unanimously. (Davila absent)

Tim Arends turned the meeting over to Chairperson McGuire.

Chairperson McGuire opened the floor to nominations for Vice Chairperson of the Light and Power Board:

Shamroe nominated John Taylor, Geht seconded.

Chairperson McGuire closed the floor to nominations.

CARRIED unanimously. (Davila absent)

Chairperson McGuire recommended Tim Arends be reappointed Secretary for the Light and Power Board. Consensus of the Board that Tim Arends be reappointed Secretary for the Light and Power Board.

Chairperson McGuire asked for volunteers to serve on the Human Resources Ad Hoc Committee. Shamroe, Hammersley, and Geht volunteered, with Taylor as the alternate.

CARRIED unanimously. (Davila absent)

#### Item 2 on the Agenda being Disclosure of Recusal

#### Item 3 on the Agenda being Consent Calendar

Moved by Shamore, seconded by Hammersley, that the following actions, as recommended on the Consent Calendar portion of the Agenda, be approved:

- a. Approval of Agenda
- b. Minutes of the Regular Meeting of March 13, 2018.
- c. Approval of the Electric Utility 2018-19 Operating Budget.
- d. Approval of the Fiber 2018-19 Operating Budget.
- e. Approval of a Construction Agreement for the Critical and Large Customer #2 Project.
- f. Approval of a Construction Agreement for the Substation Circuit Exits Project.
- g. Approval of a purchase order for miscellaneous materials for Critical and Large Customer #2 Project.
- h. Approval of the amendment to Maplenet Wireless Dark Fiber Services Agreement.

CARRIED unanimously. (Davila absent)

#### Items Removed from the Consent Calendar

None.

#### Item 4 on the Agenda being Unfinished Business

- a. Public Hearing regarding:
  - Renewable Electric Energy Rider adoption as of April 20, 2018.

Chairperson McGuire opened the Public Hearing.

The following individuals from the Public addressed the Board.

None.

Chairperson McGuire closed the Public Hearing.

The following individuals addressed the Board:

Tim Arends, Executive Director

Moved by Shamroe, seconded by Hammersley, that the Light & Power Board approves the adoption of the Renewable Electric Energy Rider Tariff Rate effective as of April 20, 2018.

CARRIED unanimously.

The following individuals from the Public addressed the Board:

Ann Rogers, 1236 Peninsula Drive, ratepayer Marty Colburn, City Manager

#### Item 5 on the Agenda being New Business

a. Consideration of approving the Voluntary Green Pricing Grant Program.

The following individuals addressed the Board:

Tim Arends, Executive Director

Moved by Shamroe, seconded by Werner, that the Light & Power Board approves the adoption of the Voluntary Green Pricing Grant Program.

After Board discussion, with the approval of the seconder, Shamroe rescinded the motion.

NO ACTION TAKEN.

The following individuals from the Public addressed the Board:

Dave Petrov, 9988 Riley Rd., non-ratepayer

#### Item 6 on the Agenda being Reports and Communications

- a. From Legal Counsel.
- b. From Staff.
  - 1. Presentation by Venture North.

The following individuals addressed the Board:

Laura Galbraith, Executive Director, Venture North Jacob Hardy, Key Accounts Manager & Energy Technician Tim Arends, Executive Director

2. Report on Landfill Gas and Combustion Turbine purchase power agreements.

The following individuals addressed the Board:

Karla Myers-Beman, Controller Tim Arends, Executive Director

3. Executive Director's Annual Performance Evaluation.

The following individuals addressed the Board:

Kelli Schroeder, Manager of Human Resources and Communications
4. Presentation of the Cost of Service Study.

The following individuals addressed the Board:

Karla Myers-Beman, Controller Mark Beauchamp, President, Utility Financial Solutions

#### c. From Board

Amy Shamroe thanked Jan Geht for his service as Chairman. Marty Colburn thanked Tim Arends for the FTTP Project funding meeting with Congressman Bergman.

#### Item 7 on the Agenda being Public Comment

#### a. General

The following individuals from the Public addressed the Board:

Ann Rogers, 1126 Peninsula Drive, ratepayer Rick Evans, Clean Energy Policy Specialist, Groundwork Center for Resilient Communities

There being no objection, Chairperson McGuire declared the meeting adjourned at 7:21 p.m.

Tim Arends, Secretary

LIGHT AND POWER BOARD

#### A REGULAR MEETING

Of The

#### TRAVERSE CITY LIGHT AND POWER BOARD

Will Be Held On

Tuesday, April 10, 2018

At

5:15 p.m.

At

## Traverse City Light & Power Service Center 1131 Hastings Street

Traverse City Light and Power will provide necessary reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting, to individuals with disabilities at the meeting/hearing upon notice to Traverse City Light and Power. Individuals with disabilities requiring auxiliary aids or services should contact the Light and Power Department by writing or calling the following.

Jennifer St. Amour Administrative Assistant 1131 Hastings Street Traverse City, MI 49686 (231) 932-4543

Traverse City Light and Power 1131 Hastings Street Traverse City, MI 49686 (231) 922-4940 Posting Date: 4-6-18 3:00 p.m.

#### **AGENDA**

#### Pledge of Allegiance

#### 1. Roll Call

#### ORGANIZATIONAL MEETING (p.4)

#### 2. Disclosure of Recusal

#### 3. Consent Calendar

The purpose of the consent calendar is to expedite business by grouping non-controversial items together to be dealt with by one Board motion without discussion. Any member of the Board, staff or the public may ask that any item on the consent calendar be removed therefrom and placed elsewhere on the agenda for full discussion. Such requests will be automatically respected. If an item is not removed from the consent calendar, the action noted in parentheses on the agenda is approved by a single Board action adopting the consent calendar.

- a. Approval of Agenda.
- b. Consideration of approving minutes of the Regular Meeting of March 13, 2018. (Approval Recommended) (p.8)
- c. Consideration of approving the Electric Utility 2018-19 Operating Budget. (Approval Recommended) (Myers-Beman) (p.13)
- d. Consideration of approving the Fiber 2018-19 Operating Budget. (Approval Recommended) (Myers-Beman) (p.20)
- e. Consideration of approving a Construction Agreement for the Critical and Large Customer #2 Project. (Approval Recommended) (Dixon) (p.22)
- f. Consideration of approving a Construction Agreement for the Substation Circuit Exits Project. (Approval Recommended) (Dixon) (p.25)
- g. Consideration of approving a purchase order for miscellaneous materials for Critical and Large Customer #2 Project. (Chartrand) (p.28)
- h. Consideration of approving the amendment to Maplenet Wireless Dark Fiber Services Agreement. (Approval Recommended) (Menhart) (p.30)

#### 4. Unfinished Business

- a. Public Hearing regarding:
  - Renewable Electric Energy Rider adoption as of April 20, 2018. (Arends) (p.34)

#### 5. New Business

a. Consideration of approving the Voluntary Green Pricing Grant Program. (Arends) (p.36)

#### 6. Reports and Communications

- a. From Legal Counsel.
- b. From Staff.
  - 1. Presentation by Venture North. (Galbraith) (p.39)
  - 2. Report on Landfill Gas and Combustion Turbine purchase power agreements. (Arends/Myers-Beman) (p.46)
  - 3. Executive Director's Annual Performance Evaluation (Schroeder) (p.48)
  - 4. Presentation of the Cost of Service Study. (Myers-Beman) (p.52)
- c. From Board.

#### 7. Public Comment

/js

#### FOR THE LIGHT & POWER BOARD MEETING OF APRIL 10, 2018



To:

-0

Light & Power Board

From:

Karla Myers-Beman, Controller

Date:

April 2, 2018

Subject:

Electric Fund Budget

In accordance with City Charter Chapter XVIII, section 179 (o), the 2018-19 Electric Fund Operating Budget must be submitted to the City Commission by its last meeting in April.

The Electric Fund was reviewed by the Board at the last meeting, March 13, 2018 and no changes have been made since the initial presentation. The budget is attached for your reference.

Included with the adoption of the budget staff understands the Board would like to continue with the ten-year amortization, which is now the eight-year amortization based on the market value of assets option for contributions into the Municipal Employees' Retirement System ("MERS"). This selection does not directly affect the income statement, but rather the Utility's cash flow statement. Additionally, this will be brought to the Board during the budget process on an annual basis going forward.

Staff recommends that the Board approve submittal of the 2018-19 Electric Fund Budget to the City Commission for its consideration.

This item is appearing on the Consent Calendar as it is deemed by staff to be a non-controversial item. Approval of this item on the Consent Calendar means you agree with staff's recommendation.

If any member of the Board or the public wishes to discuss this matter, other than clarifying questions, it should be placed on the "Items Removed from the Consent Calendar" portion of the agenda for full discussion.

If after Board discussion you agree with staff's recommendation the following motion would be appropriate:

MOTION ON NEXT PAGE

## FOR THE LIGHT & POWER BOARD MEETING OF APRIL 10, 2018

MOVED BY	, SECONDED BY	, THAT THE
LIGHT & POWER BOARI	APPROVES SUBMITT	AL OF THE 2018-19 ELECTRIC
FUND OPERATING BUDG	ET AS PRESENTED TO	THE CITY COMMISSION FOR
ITS CONSIDERATION.	IN ADDITION, THE	BOARD DIRECTS STAFF TO
CONTRIBUTE INTO THE	RETIREMENT SYSTEM	I BASED ON THE EIGHT-YEAR
AMORTIZATION CALCUL	ATED ON THE MARK	ET VALUE OF ASSETS OPTION
PROVIDED BY MERS.		

EV 45/40 EV 47/40 EV 47/40										
		FY 15/16 Actual		FY 16/17 Actual		FY 17/18 Budget		FY 17/18 Projected	Re	FY 18/19 ecommended
Operating Income:	\$	35,530,044	\$	34,513,531	\$	36,065,200	\$	34,167,200	\$	34,171,700
Operating Expenses:								is .		
Purchase Power Expenses:										
Capacity	\$	465,421	\$	693,921	\$	The state of the s	\$	810,700	\$	673,000
Purchased Power - MISO		3,766,366		613,006		2,640,000		550,000		2,311,400
Purchased Power - Lansing BWL		2,898,085		0.445 505		0.470.000				
Stoney Corners - Wind Energy Combustion Turbine Power Cost		2,940,041 3,338,292		3,115,585 4,254,812		3,170,000 4,500,000		2,930,000 4,415,000		3,152,000
Campbell #3 Power Cost		3,793,717		3,834,696		4,522,500		4,415,000		4,541,200 4,402,000
Belle River #1 Power Cost		3,749,902		4,062,954		3,800,000		2,980,000		1,988,000
Landfill Gas - Granger Project		567,834		858,858		980,000		940,000		930,000
M-72 Wind Turbine		35,056		27,551		48,000		30,000		30,000
M-72 Solar		-				100 Total		82,000		128,000
Pegasus Wind				-		-		-		260,000
Bilateral Contracts		1,100,866		4,252,243		3,300,000		4,424,000		2,432,000
Other Generation Expenses		414,424		418,943		329,050		187,000		250,575
Total Purchase Power Expenses		23,070,004		22,132,569		24,099,550		21,358,700		21,098,175
Distribution Expenses:										
Operations & Maintenance		4,424,951		3,800,057		4,261,500		4,014,425		4,319,950
Transmission Expenses:										
Operations & Maintenance		421,135		444,502		525,100		434,735		471,400
Other Operating Expenses:										
Metering & Customer Accounting		577,278		501,210		561,550		509,900		501,000
Conservation & Public Services		671,545		466,506		593,000		491,550		569,300
Information Systems						-				480,650
Administrative & General		986,037		1,258,666		1,276,100		1,249,400		981,900
Insurance		62,001 2,254,188		73,530		70,720		75,000		87,625
Depreciation Expense City Fee		1,784,900		2,511,527 1,729,139		2,605,000 1,820,000		2,605,000 1,716,000		2,700,000 1,712,200
== (3,000 € 7,500 ± 4,000,000 t)										
Total Other Operating Expenses		6,335,949		6,540,578		6,926,370	_	6,646,850		7,032,675
Total Operating Expenses		34,252,039		32,917,706		35,812,520		32,454,710		32,922,200
Operating Income	\$	1,278,005	\$	1,595,825	\$	252,680	\$	1,712,490	\$	1,249,500
Non Operating Revenues/(Expenses):										
Non Operating Revenues		737,684		297,670		555,800		1,086,000		539,400
Non Operating Expenses	10	(355,965)		(5,965)				-		
Total Non Operating Revenue		381,719		291,705		555,800		1,086,000		539,400
Special Item										
Retirement of meters	(1			-	2000	1,50		-		(725,000)
OTHER FINANCING SOURCES:										
Transfers in		175,000		125,000		125,000		125,000		175,000
Change in Net Position	\$	1,834,724	•	2,012,530	\$	933,480	^	2,923,490	\$	1,238,900

		FY 15/16		FY 16/17		FY 17/18		FY 17/18		FY 18/19
		Actual		Actual		Budget		Projected	Re	commende
OPERATING REVENUES:									ST COLOR	
Residential Sales	\$	6,090,231	\$	6,121,779	\$	6,400,000	S	5,960,000	\$	6,035,00
Commercial Sales		15,348,675	70	14,832,506	×	15,560,000		14,700,000		14,800,00
Industrial Sales		9,615,567		9,594,935		10,050,000		9,580,000		9,670,00
Public Authority Sales		309,162		299,780		300,000		280,000		285,00
Street Lighting Sales		203,949		209,592		225,000		225,000		225,00
Yard Light Sales		98,529		106,527		155,000		144,000		144,00
Total Utility Sales		31,666,113		31,165,119		32,690,000		30,889,000		31,159,00
Forfeited Discounts		60,777		50,712		60,000		50,000		50,00
Merchandise and Jobbing		231,826		91,528		70,000		124,000		73,50
Recovery of Bad Debts		26		151		200		200		20
Sale of Scrap		41,792		26,911		35,000		65,000		50,00
Miscellaneous Income		41,663		38,154		39,500		37,000		37,00
Refunds and Rebates		4,795		17,335		500		2,000		
MISO Revenue		3,483,052		3,123,621		3,170,000		Indiana and the second second		2,00
STEED OF THE TOTAL STEED STEED	e Votes	TO MA HER MANAGEMENT AND AND AND AND AND AND AND AND AND AND	STATE OF			3,170,000	101	3,000,000		2,800,00
TOTAL OPERATING REVENUES	\$	35,530,044	\$	34,513,531	\$	36,065,200	\$	34,167,200	\$	34,171,70
PERATING EXPENSES:				N						
PURCHASE POWER										
Salaries and Wages	\$	123,124	\$	101,437	\$	62,000	\$	(14,600)	\$	12,50
Fringe Benefits		192,648		195,024		142,700	6	67,500	(M)	107,50
Wind Generation - Traverse						50A5340 503/		- 1,		,
Trap and Transfer		21				250		250		25
Union Street Fish Ladder		_		_		250		250		25
Kalkaska Combustion Turbine		-		5,613		200		200		20
Operation Supplies		-		0,010		1,000		1,000		1,00
Software and Hardware				100		1,000		300		1,00
Capacity Purchases		465,421		693,921		810,000		810,700		673,00
Purchased Power - MISO Market		3,766,366		613,006		2,640,000		550,000	samon de la companya	2,311,40
Bilateral Contracts (offsetting MISO Market)		1,100,866		4,252,243		3,300,000		4,424,000	600000	2,432,00
Purchased Power - LBWL		2,898,085		-		0,000,000		4,424,000		2,432,00
Combustion Turbine Power Cost		3,338,292		4,254,812		4,500,000		4,415,000		4,541,20
Campbell #3 Power Cost		3,793,717		3,834,696		4,522,500		4,010,000		4,402,00
Belle River #1 Power Cost		3,749,902		4,062,954		3,800,000		2,980,000		1,988,00
Stoney Corners - Wind Energy		2,940,041		3,115,585		3,170,000				
Landfill Gas - NANR & Granger Project		567,834		858,858				2,930,000		3,152,00
M72 Wind Turbine						980,000		940,000		930,00
		35,056		27,551		48,000		30,000		30,00
M72 Solar		-		-		-		82,000		128,00
Pegasus Wind  Total Purchase Power		20.055.500		04 740 000	250000					260,00
Puchased Power Cost as % of Sales		22,655,580 71.55%		21,713,626		23,770,500		21,171,700		20,847,60
Coal Dock				69.67%		72.71%		68.54%		66.91
Communications		2,842 170		171		050		-		
		170		1/1		250		300		30
Meal Payments		0.004		0.445		200				
Safety		2,994		2,415		3,500		3,500		3,500
Tools		-		-		500		500		500
Professional and Contractual		85,029		100,384		96,000		93,500		93,500
Transportation		6,316		6,449		7,000		7,000		7,500
Professional Development		use normal		175		500		1,500		1,500
Uniforms		3,456		3,325		3,500		3,000		4,27
Vehicle Rentals		(3,308)		3,820		11,400		23,000		18,000
Miscellaneous		1,153		30		121		-		
otal Purchase Power _		23,070,004		22,132,569		24,099,550		21,358,700		21,098,178
ISTRIBUTION OPERATION & MAINTENANCE:										
Salaries and Wages		1,226,717		1,098,243		1,213,000		1,218,025		1,458,550
Fringe Benefits		1,611,956		1,543,663		1,616,000		1,425,800		1,528,400
Office Supplies		3,160		4,775		4,000		2,000		4,000
Operation Supplies		51,121		36,148		40,000		40,000		40,000
Utilities		44,244		52,728		51,000		54,000		56,000
Meals and Payments		3,231		2,443		5,000		2,800		3,000
The second secon		33,987		24,077		-,000		,000		0,000

	FY 15/16	FY 16/17	FY 17/18	FY 17/18	FY 18/19
	Actual	Actual	Budget	Projected	Recommended
Software and Hardware	74,618	95,078	191,400	100,000	
Substation	70,618	103,743	120,000	270,000	150,000
Overhead Lines	170,363	222,665	205,000	212,800	217,70
Load and Dispatching	25,000	25,991	31,500	32,300	34,10
Storm Damage Contingency	448,383	-	50,000	12 <b>44</b>	50,00
Underground Lines	97,922	54,830	30,000	50,000	30,00
Electric Meters	2,624	2,933	6,000	4,000	4,00
Street Lighting Traffic Signal Oper. & Maint.	217,587 1,767	212,558	230,000	225,000	230,00
Radio Equipment	3,244	4,952 9,860	5,000 5,000	5,000 2,500	5,00
Plant & Structures	94,302	81,830	82,000	80,800	2,50 75,00
Safety	27,538	29,578	38,000	30,000	35,00
Tools	14,969	23,372	31,000	20,000	15,00
Uniforms	22,218	20,672	25,000	21,000	24,00
Professional and Contractual	139,050	84,768	94,000	62,000	82,00
Rent Expense	1,757		2,000	2,000	2,000
Professional Development	28,861	47,176	65,000	48,000	55,000
Printing and Publishing	4,110	4,948	4,000	4,000	4,500
Transportation	23,796	23,742	28,000	30,500	32,000
Vehicle Rentals	(23,539)	(12,567)	16,600	8,900	69,000
Miscellaneous	1,673	2,633	1,500	5,000	5,000
Inventory Adjustments	3,674	(782)	10,000	10,000	10,000
Total Distribution O & M	4,424,951	3,800,057	4,261,500	4,014,425	4,319,950
TRANSMISSION OPERATIONS & MAINTENANCE:	202/202	CO.			
Salaries and Wages	232,813	219,225	294,100	222,000	235,000
Fringe Benefits	409	2,503	3,500	4,000	4,000
Substation Overhead Lines	14,496 76,567	45,927 33,623	50,000	75,000	82,000
Load and Dispatching	70,307	10,259	23,000 13,500	20,000 12,735	25,000 14,400
MISO Transmission	32,494	38,466	36,000	36,000	41,000
Tools		-	9,000	-	- 1,000
Professional and Contractual		- [	15,000	<u>.</u>	5,000
Vehicle Rentals	223	2,242	3,000	1,000	1,000
Miscellaneous-MPPA Transmission Project	64,133	55,289	78,000	64,000	64,000
Inventory Adjustments	14	36,968		-	=
Total Transmission O & M	421,135	444,502	525,100	434,735	471,400
METERING & CUSTOMER ACCOUNTING:					
Salaries and Wages	273,710	251,092	263,700	245,800	248,000
Fringe Benefits	190,106	155,678	164,600	135,300	133,100
Office Supplies	3,610	1,737	4,200	4,000	4,000
Operations Supplies	-	-	2	200	200
Communications	110	50	250	200	200
Hardware/Software Meal Payments	22	1,350	8,000 200	3,800	-
Safety	4,990	1,610	3,500	100 4,000	100
Uniforms	1,826	3,188	3,000	3,000	4,000 3,000
Professional and Contractual	23,893	18,509	13,000	27,000	24,000
Postage	28,185	16,575	33,000	30,000	30,000
Uncollectable Accounts	1,739	7,690	10,000	7,800	5,000
Collection Costs	4,118	3,669	5,000	4,000	4,000
Data Processing	20,197	15,890	25,000	20,000	20,000
Transportation	2,344	2,127	4,500	4,000	4,200
Professional Development	1,124	1,494	5,000	2,500	2,500
Printing and Publishing	684	62	4,000	1,000	1,000
Vehicle Rentals	19,666	19,422	14,000	16,000	16,500
Miscellaneous	954	1,047	600	1,200	1,200
Total Customer Accounting	577,278	501,210	561,550	509,900	501,000
CONSERVATION & PUBLIC SERVICES:	20.101	40.7==	**		
Salaries and Wages	22,481	12,470	13,300	45,000	60,000
Fringe Benefits	34,637	9,887	9,700	21,950	27,100

	FY 15/16 Actual		FY 16/17 Actual		FY 17/18 Budget	FY 17/ Project		Re	FY 18/19 commended
Office Supplies					and an in the state with		4.000		4.000
Professional and Contractual	4,01	1	20,916		1,500		1,000 1,100		1,000 1,500
Contract Labor - Energy Optimization	30,94		20,510		1,500		1,100		1,500
Public Service & Communications	32,65		17,940		22,000	1	0,000		25,900
Community Services	32,24		35,960		35,000		5,000		48,500
Professional Development	-	•	498	1	-	•	1,000		3,800
Printing and Publishing	-		49		-		1,500		1,500
Vehicle Rentals	3,94	3	8,670		6,500		5,000		5,000
PA295 Energy Optimization Compliance	510,63		360,116		505,000		0,000		395,000
Total Conservation & Public Services	671,54	5	466,506		593,000	49	1,550		569,300
NFORMATION SYSTEMS									
Salaries and Wages	1		-		-		-		142,000
Fringe Benefits			( <del>-</del>		-				128,800
Office Supplies	Ð <b>=</b>		·=:		( <b>=</b> )(		-		1,000
Operation Supplies	100		<b>14</b> 3		-		-		10,100
Communications	-		-		-		en i		2,000
Software	(6)		-		( <b>=</b> ):		-		121,250
Hardware	-		₩:		-		<b>12</b> 0		20,000
Professional and Contractual	. 18				*		Ε.		50,000
Professional Development	-		•	THE STATE OF THE S			-		5,500
Total Information Systems	-						•		480,650
ADMINISTRATIVE AND GENERAL:	000.40								
Salaries and Wages	386,497		517,101		515,700		7,000		401,100
Fringe Benefits	322,167		462,158		474,100		4,800		305,600
Office Supplies	5,973		11,307	attuniti a	6,000		7,000		7,000
Communications	3,909		6,452		4,400		0,000		6,000
Software and Hardware	18,579		24,100		15,000		5,600		-
Fees and Per Diem	67,613		64,601	100000000000000000000000000000000000000	70,000		5,000		66,700
Board Related Expenses	3,872		2,659		15,000		3,000		5,000
Professional & Contractual	82,759		73,293		67,400		7,500		76,500
Legal Services	57,950		57,112		65,000		0,000		75,000
Employee Appreciation	7,073		7,195		7,000		5,000		7,000
City Fee	1,784,900		1,729,139		1,820,000	0.000	6,000		1,712,200
Transportation	619		326		1,500		1,500		1,500
Professional Development	15,985		21,890		25,000		2,000		19,500
Printing & Publishing	4,682		4,733		5,000		5,000		5,000
Insurance and Bonds	62,001		73,530		70,720		5,000		87,625
Miscellaneous	8,359		5,739		5,000		6,000		6,000
Depreciation Expense	2,254,188		2,511,527	100	2,605,000	250,7600	5,000		2,700,000
Total Administrative and General	5,087,126		5,572,862		5,771,820	5,64	5,400		5,481,725
Total Operating Expenses	34,252,039	10	32,917,706		35,812,520	32,45	4,710		32,922,200
Operating Income	\$ 1,278,005	\$	1,595,825	\$	252,680	\$ 1,71	2,490	\$	1,249,500
ION OPERATING REVENUES/(EXPENSES):				100000000000000000000000000000000000000			-		
Rents and Royalties	\$ 44,387	\$	38,880	\$	46,500	\$ 5	1,000	\$	53,400
Pole Rentals	48,860	h.	65,866		68,000	PC 201	9,000	- OF-S	81,000
Reimbursements	296,244		236,776		91,300		3,000		150,000
Interest & Dividend Earnings	348,193		(43,852)		350,000	25	0,000		250,000
Gain/(Loss) on Sale of Fixed Assets	(355,965	5)	(5,965)	16	**************************************		3,000		5,000
Total Non Operating Revenue/(Expenses)	381,719		291,705		555,800	1,08	6,000		539,400
ncome before special items	1,659,724	•	1,887,530		808,480	2,79	3,490		1,788,900
DECLA JEST									
PECIAL ITEM							TAN DESCRIPTION OF THE PERSON		
Retirement of meters			-				-		(725,000
Change in Net Position before Transfers	\$ 1,659,724	\$	1,887,530	\$	808,480	\$ 2,79	3,490	\$	1,063,900

	FY 15/16 Actual	FY 16/17 Actual	FY 17/18 Budget	FY 17/18 Projected	FY 18/19 commended
OTHER FINANCING SOURCES: Operating Transfers In	 175,000	125,000	125,000	125,000	175,000
Change in Net Position	\$ 1,834,724	\$ 2,012,530	\$ 933,480	\$ 2,923,490	\$ 1,238,900



1134 Municipal Way Lansing, MI 48917 | 800.767.MERS (6377) | Fax 517.703.9711

jiwww.mersofmlch.com

The Employer, a participating municipality or participating court within the state of Michigan, hereby agrees to adopt and administer the MERS Defined Benefit Plan provided by the Municipal Employees' Retirement System of Michigan, as authorized by 1996 PA 220, in accordance with the MERS Plan Document, as both may be amended, subject to the terms and conditions herein.

. Employer Na	Traverse City Light & Power (TCL&P)	Municipality #: 2811
f new to MERS	6, please provide your municipality's fiscal year: Month	through June
I. Effective Da		11010
Check one:		
	this is the Initial Adoption Agreement for this group, the effective of the Initial Adoption Agreement for this group, the effective of the Initial Adoption Agreement for this group, the effective of the Initial Adoption Agreement for this group, the effective of the Initial Adoption Agreement for this group, the effective of the Initial Adoption Agreement for this group, the effective of the Initial Adoption Agreement for this group, the effective of the Initial Adoption Agreement for this group, the effective of the Initial Adoption Agreement for this group, the effective of the Initial Adoption Agreement for this group, the effective of the Initial Adoption Agreement for this group, the effective of the Initial Adoption Agreement for Initial Adoption Agreement for the Initial Adoption Agreement for the Initial Adoption Agreement for Initial Adoption Agreement for Initial Adoption Agreement for Initial Adoption Agreement for Initial Adoption Agreement for Initial Adoption Agreement for Initial Adoption Agreement for Initial Adoption Agreement for I	ective date shall be the first day
	☐ This municipality or division is new to MERS, so vesting effective date by each eligible participant shall be credit	
	<ul> <li>All prior service from date of hire</li> </ul>	
	☐ Prior service proportional to assets transferred;	all service used for vesting
	<ul> <li>Prior service and vesting service proportional to</li> </ul>	assets transferred
	<ul> <li>No prior service but grant vesting credit</li> </ul>	
	☐ No prior service or vesting credit	
	Link this new division to division number 01 for p contributions (Unless otherwise specified, the standard	. •
	this is an amendment of an existing Adoption Agreement ( ), the effective date shall be the first day of need to mark <i>changes</i> to your plan throughout the remaind	, 20 <i>Please note:</i> You
	this is a temporary benefit that lasts 2-6 months, the effective fit are from/01/ through/ for Defined Ben Last day of month	
Pleas	e note: You only need to mark changes to your plan throug ement.	shout the remainder of this
numb	this is to separate employees from an existing Defined Ben per(s)	) into a new division,
	this is to merge division(s) into divising the first of, 20, 20, 20, 20, 20, 20, 20, 20, 20, 20	

III.(Ei(gible Employees)
Only those Employees eligible for MERS membership may participate in the MERS Defined Benefit Plan. A copy of ALL employee enrollment forms must be submitted to MERS. The following groups of employees are eligible to participate:
Non-Union-Employeesthiredron/after 07/01/2017 (Name of Defined Benefit division - e.g. All Full Time Employees, or General after 7/01/13)
Only retirees will be in this division.
To receive one month of service credit (checklone):
An employee shall work 10 (5) hour days.
🛱 An employee shall work hours in a month.
All employees as classified under eligible employees, whether full or part time, who meet this criteria must be reported to MERS. If you change your current day of work definition to be more restrictive, the new definition only applies to employees hired after the effective date.
To further define eligibility, (check all that apply)
☐ Probationary Periods are allowed in one-month increments, no longer than 12 months. During this Introductory period, the Employer will not report or provide service time for this period, including retroactively. Service will begin after the probationary period has been satisfied.
The probationary period will be month(s).
Temporary employees in a position normally requiring less than a total of 12 whole months of work in the position may be excluded from membership. These employees must be notified in writing by the participating municipality that they are excluded from membership within 10 business days of date of hire or execution of this Agreement.
The temporary exclusion period will be month(s).
IV. Provisions
Valuation Date: NA (normal cost provided) 20
Review the valuation results
,
It is recommended that your MERS representative presents and explains the valuation results to your municipality before adopting. Please choose one:
Our MERS representative presented and explained the valuation results to the
(Board, Finance Crite, etc.) On(mm/dd/yyyy)
As an authorized representative of this municipality, i(Name)
walve the right for a presentation of the results.

(Z)	Normal Retirement Age: 60 (any age from 60 - 70)					
(8)	Unreduced Early Retirement/Service Requirements;  □ Age 50 = 54 Service of either □ 25 or □ 30 years					
	✓ Age 55 – 65 55 Service between 15 a	nd 30 years <u>25</u>				
	Service only (must be any number from 20	-30 years accrued service):				
	☐ Age + Service Points (total must be from 70	- 90): points				
	<ul> <li>Surviving Spouse will receive% of Straight Life benefit without a reduction to the participant's benefit</li> <li>Duty death or disability enhancement (add up to additional 10 years of service credit not to exceed 30 years of service)</li> <li>Deferred Retirement Option Program (DROP)</li> <li>Annuity Withdrawal Program (AWP)</li> <li>Calculation of the actuarial equivalent of the lump sum distribution made under AWP will be done using:         <ul> <li>Interest rate for employee contributions as determined by the Retirement Board, or</li> <li>MERS' assumed rate of return as of the date of the distribution.</li> </ul> </li> </ul>					
(10)	Cost-of-Living Adjustment					
	All current retirees as of effective date  Retirees who retire between  /01/ and/01/ (one time increase only)	☑ Future retirees who retire after effective date				
	Increase of% or \$ per month	Increase of 2.5 % or \$ per month				
	Select one:  Annual automatic increase  One-time increase	☐ Annual automatic increase				
	Select one: Compounding Non-compounding	Select one: Compounding Non-compounding				
	Employees must be retired months (6-12 months, increments of 1 month)	Employees must be retired months (6-12 months, increments of 1 month)				
AH.	Service Credit Purchase Estimates are:  Not permitted Permitted					

This Adoption Agreement will be implemented in conjunction with a current actuarial valuation certified by a MERS actuary that sets contribution rates.

Annually, the MERS actuary will conduct an actuarial valuation to determine the employers' contribution rates. Employers are responsible for payment of said contributions at the rate, in the form and at the time that MERS determines.

(2)	Benefit Multiplier (1%-2.5%, increments of 0.05%) 1.5 % (max 80% for multipliers over 2.25%)							
	Check here if multiplier will be effective for existing active members' future service only (Bridged Benefit as of effective date on page 1)							
	If checked, select one below:							
	Termination Final Average Compensation (calculated over the members entire wage history)							
	☐ Frozen Final Average Compensation (FAC is calculated twice, once for the timeframe that matches the original multiplier, and once for the new multiplier)							
3.	Final Average Compensation (Min 3 yr, increments of 1 yr) 5 years							
4.	. Vesting (5 -10 yrs, increments of 1 yr) 6 years							
5.	. Required employee contribution (Max 10%, increments of 0.01%) 0.00 %							
(6) Compensation, for retirement purposes, is defined as base wages and all of the following Check applicable boxes to (1) these types from your MERS reported wages:								
	<ul> <li>□ Longevity pay</li> <li>□ Overtime pay</li> <li>□ Shift differentials</li> <li>☑ Pay for periods of absence from work by reason of vacation, holiday, and sickness</li> <li>□ Workers' compensation weekly benefits (if reported and are higher than regular earnings)</li> <li>□ A member's pre-tax contributions to a plan established under Section 125 of the IRC</li> <li>□ Transcript fees paid to a court reporter</li> <li>□ A taxable car allowance</li> <li>□ Short term or long term disability payments</li> <li>□ Payments for achievement of established annual (or similar period) performance goals</li> <li>□ Payment for attainment of educational degrees from accredited colleges, universities, or for acquisition of job-related certifications</li> <li>□ Lump sum payments attributable to the member's personal service rendered during the FAC period</li> <li>☑ Other: Only service credit for STD insurance and worker's comp.</li> </ul>							
	Other 2:							

#### V. Appointing MERS as the Plan Administrator

The Employer hereby agrees to the provisions of this *MERS Defined Benefit Plan Adoption Agreement* and appoints MERS as the Plan Administrator pursuant to the terms and conditions of the Plan. The Employer also agrees that in the event of any conflict between the MERS Plan Document and the MERS Defined Benefit Plan Adoption Agreement, the provisions of the Plan Document control.

#### VI. Modification Of The Terms Of The Adoption Agreement

If the Employer desires to amend any of its elections contained in this Adoption Agreement, Including attachments, the Governing Body or Chief Judge, by resolution or official action accepted by MERS, must adopt a new Adoption Agreement. The amendment of the new Agreement is not effective until approved by MERS.

#### VII. Enforcement

- 1. The Employer acknowledges that the Michigan Constitution of 1963, Article 9, Section 24, provides that accrued financial benefits arising under a public Employer's retirement plan are a contractual obligation of the Employer that may not be diminished or impaired, and prohibits the use of the Employer's required current service funding to finance unfunded accrued liabilities.
- 2. The Employer agrees that, pursuant to the Michigan Constitution, its obligations to pay required contributions are contractual obligations to its employees and to MERS and may be enforced in a court of competent jurisdiction;
- 3. In accordance with the Constitution and this Agreement, if at any time the balance standing to the Employer's credit in the reserve for employer contributions and benefit payments is insufficient to pay all service benefits due and payable to the entity's retirees and beneficiaries, the Employer agrees and covenants to promptly remit to MERS the amount of such deficiency as determined by the Retirement Board within thirty (30) days notice of such deficiency.
- 4. The Employer acknowledges that wage and service reports are due monthly, and the employee contributions (if any) and Employer contributions are due and payable monthly, and must be submitted in accordance with the MERS Enforcement Procedure for Prompt Reporting and Payment, the terms of which are incorporated herein by reference.
- 5. Should the Employer fall to make its required contribution(s) when due, the retirement benefits due and payable by MERS on behalf of the entity to its retirees and beneficiaries may be suspended until the delinquent payment is received by MERS. MERS may implement any applicable interest charges and penalties pursuant to the MERS Enforcement Procedure for Prompt Reporting and Payment and Plan Document Section 79, and take any appropriate legal action, including but not limited to filing a lawsuit and reporting the entity to the Treasurer of the State of Michigan in accordance with MCL 141,1544(d), Section 44 of PA 436 of 2012, as may be amended.
- 6. The Employer acknowledges that changes to the Employer's MERS Defined Benefit Plan must be made in accordance with the MERS Plan Document and applicable law, and agrees that MERS will not administer any such changes unless the MERS Plan Document and applicable law permit same, and MERS is capable of administering same.

the <u>3AL</u> day of	loption Agreemen	t is nereby app 		100	lame of Abbi	VIDO Employe	<u>)</u> or
(Authorized signa	<u>, , , , , , , , , , , , , , , , , , , </u>	And		•	10.1		
Executive	Director	3 20 0	2.4	e green f		_ ,	
(Witness signatur	o Kula	Ryn	1 - Bew	<u>~</u>	e,	-	
		V					••



### MERS DB Plan – Estimated Employer Contribution Rate Traverse City Light & Power (2811) – Division 01 New Hires, Rehires & Transfers

Benefit Provisions  Benefit Formula  Normal Retirement Age  Vesting Provision  Early Retirement (Unreduced)  Early Retirement (Reduced)  FAC Period  Member Contribution Rate  Disability and Death Benefits  Benefit E-2	1.50% Multiplier (no max) 60 V-6 F55(25) 50/25 55/15 FAC-5 0.00% MERS Standard 2.50% (Non-Compound)
<ul> <li>Benefit E-2</li> <li>SLIF or Maximum Leave Provision</li> <li>Estimated Average Entry Age of New Hires</li> <li>Expected Average Vesting/Eligibility Service</li> </ul>	2.50% (Non-Compound) - 30 years 0.0 years
Employer Contribution as a Percentage of Payroll	7.73%

If member contributions are increased/decreased by 1.00% of pay, the Employer Normal Cost Contribution Rate will decrease/increase by 0.88%.

### **Important Comments**

- The actuarial assumptions and the methods used in these calculations are the same as the assumptions and methods that were used in the December 31, 2016 MERS annual actuarial valuations, unless otherwise noted. The following assumptions are unique to this municipality:
  - a. A withdrawal rate scaling factor of 1.0 was applied to the standard MERS withdrawal table in order to better reflect the withdrawal experience of this municipality.
  - b. A final average compensation (FAC) increase assumption of 0% was used for this division to reflect deviations within this municipality, if any, between actual FAC experience at retirement and what was expected based on previously reported annual pays.
- 2. The reader of this report should understand that actuarial calculations are mathematical estimates based on current data and assumptions about future events that may or may not materialize. Actuarial calculations can vary from one valuation year to the next, and the actual employer contribution rate can and will change over time as the assumptions about future events are replaced by actual experience.
- 3. If new hires have prior service that can be used for vesting and/or eligibility purposes, the actual employer contribution may be materially different than the rate shown above.

June 12, 2017 Page 1



- 4. The estimated average entry age of future new hires was provided by the employer. Please note this is a very important assumption because the estimated employer contribution rate depends, in part, on the entry age of the new hires. Generally, the older the new hires, the higher the employer cost as a percentage of payroll. If the entry age of future new hires is materially different from the assumed entry age, the actual employer contribution could be materially different than the estimated employer contribution shown above.
- 5. If you have questions on the above results, or how to implement this benefit, please contact MERS at (800) 767-2308.

June 12, 2017 Page 2