

A SPECIAL MEETING

Of The

TRAVERSE CITY LIGHT AND POWER BOARD

Will Be Held On

TUESDAY, June 07, 2016

At

5:15 p.m.

In The

COMMISSION CHAMBERS
(2nd 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: 06-03-16
2:00 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 May 24, 2016. (Approval recommended) (p.4)
- b. Consideration of BW-31 Project Authorization Request. (Approval recommended) (Schimpke) (p.6)
- c. Consideration of approving the Electric and Fiber Fund Budget and Capital Plan. (Myers-Beman) (Approval recommended) (p.10)
- d. Consideration of approval for the Garland Street Lighting agreement and purchase order. (Approval recommended) (Myers-Beman) (p.11)
- e. Consideration of approving the 2016-2017 Insurance Renewal. (Approval recommended) (Myers-Beman) (p.13)

Items Removed From Consent Calendar

- a.

3. Unfinished Business

None.

4. New Business

- a. Approval of wind purchase power commitment with Michigan Public Power Agency. (Arends/MPPA) (p.32)

5. Appointments

None.

6. Reports and Communications

- a. From Legal Counsel.

- b. From Staff.
 - 1. High level discussion regarding large scale Solar generation as it pertains to TCL&P (Arends/MPPA) (p.47)
 - 2. Presentation of third quarter financial report. (Myers-Beman) (p.52)

- c. 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, May 24, 2016

Board Members -

Present: Pat McGuire, Amy Shamroe, Bob Spence, John Taylor, Tim Werner, Jan Geht, Jeff Palisin

Absent:

Ex Officio Member -

Present: Marty Colburn, City Manager

Others: Karla Myers-Beman, Kelli Schroeder, Jennifer St. Amour

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

Tim Werner requested item 2b be removed from the Consent Calendar for full 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 May 10, 2016.

CARRIED unanimously.

Items Removed from the Consent Calendar

- a. Consideration of the transfer of funds from the Fiber Fund to Electric Fund.

The following individuals addressed the Board:

Karla Myers-Beman, Controller

Moved by Shamroe, seconded by Palisin, that the Board authorizes the interfund transfer of \$175,000 from the Fiber Fund to the Electric Fund.

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. TCL&P Funding Survey results presentation.

The following individuals addressed the Board:

Cathlyn Sommerfield, Ph.D., CS Research & Consulting, LLC

Kelli Schroeder, Manager of HR & Communications

Karla Myers-Beman, Controller

Marty Colburn, City Manager

c. From Board.

None.

Item 7 on the Agenda being Public Comment

Rick Buckhalter, 932 Kelley St., ratepayer

There being no objection, Chairman Geht declared the meeting adjourned at 6:36 p.m.

/js

Tim Arends, Secretary
LIGHT AND POWER BOARD



**TRAVERSE CITY
LIGHT & POWER**

To: Light & Power Board
From: Pete Schimpke, Manager of Operations & Engineering
Date: May 31, 2016
Subject: 2016 Distribution Circuit Rehabilitation Circuit BW-31

As reported to the Board on several occasions over the last few years, TCLP Staff has been working on the design and cost estimate for the rehabilitation of circuit BW-31 out of our Barlow Substation. Recently, we noticed that no Project Authorization Request (PAR) was ever submitted to the Board.

The cost estimate is \$862,600. In an effort to be consistent with other Capital Improvement Projects and in accordance with proper established procedures we are now submitting the PAR for Board approval. Gaining approval will allow Staff to proceed and complete the project.

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 AUTHORIZES STAFF TO PROCEED WITH THE 2016 DISTRIBUTION CIRCUIT REHABILITATION PROJECT, CIRCUIT BW-31, AT AN APPROXIMATE COST \$862,600 AND DIRECTS STAFF TO SOLICIT CONTRACT LABOR & MATERIAL QUOTES FOR THE BOARD'S CONSIDERATION OF APPROVAL.

Date of Board Presentation/Consideration: June 7, 2016

Budgeted in Capital Plan: Yes **CIP:** \$675,000

Objective: Target Completion date of June 30, 2017

Project Description:

Rehabilitate distribution facilities on the Barlow Circuit BW-31 to improve reliability and public safety. This project includes replacing approximately 192 deteriorated poles, about 17,900 feet of old copper primary and secondary conductor and 28 transformers. Existing 336 ACSR conductor will be reused on the new pole structures for the 3-phase part of the circuit. This project affects almost 749 Traverse City Light & Power (TCL&P) customers. The project location involves the areas starting at the Barlow Substation just south of Eighth Street on Barlow Street, going north to Front Street, then going east of Front Street to Peninsula Drive and Milliken Drive. The circuit then goes north on Peninsula Drive to Center Road and north on Milliken Drive to Eastern Avenue.

Selection Method:

The Barlow Circuit BW-31 was chosen from 25 distribution circuits based on number of customers as well as reliability history.

Project Purpose and Necessity

Many years of being exposed to ice, wind, rain, and snow have left the Barlow Circuit BW-31 in need of repair. While poles, wires, and other pieces of equipment continue to deteriorate, the risk of poles and wires falling on the ground continues to increase -- posing a public safety concern. In addition, more interruptions of service to our customers will occur with longer durations.

Project Benefits:

The 2016 Distribution Circuit Rehabilitation of Barlow Circuit BW-31 will:

- Improve public safety by reducing the chance of poles and wires falling down.
- Improve customer service by reducing outages as well as duration of outages.
- Reduce energy needs by reducing losses in older and smaller conductors.
- Reduce maintenance costs associated with emergency repairs.

Other Alternatives:

Do nothing. Public safety could be jeopardized by falling wires and poles. Customer satisfaction will decline as the number of outages along with the duration of outages will climb. Maintenance costs will increase as more money will be spent on emergency repairs. There will be no conservation of energy since the smaller and older conductors will continue to cause higher line losses as compared to installing new larger conductors.

Timing of Project

TCL&P currently has 25 distribution circuits. Most will require at least one-half to one full year rehabilitation in the up-coming years. This yearly rehabilitation project must begin now in order for us to perform timely repairs on the various circuits.

Cost Estimate:

Materials	\$ 169,000
Contract Labor	\$ 495,000
Contingency (15%)	\$ 99,600
<u>Engr & Administration & Construction Inspections</u>	<u>\$ 99,000</u>
Total	\$ 862,600

Financing Method:

Cash from TCL&P fund balance and as planned for in the six year Capital Plan. Bonding will not be required.

Impact on O&M Expenses:

A reduction in annual maintenance costs associated with normal maintenance and emergency repairs will occur.



Staff Recommendation:

Staff recommends the TCL&P Board approval of the 2016 Distribution Circuit Rehabilitation of Barlow Circuit BW-31 and all necessary expenditures in order to maintain safe and reliable distribution service to its customers.



TRAVERSE CITY
LIGHT & POWER

To: Light and Power Board
From: Karla Myers-Beman, Controller
Date: May 25, 2016
Subject: 2016-17 Budget Adoption

It is expected at its June 6, 2016 meeting the City Commission will pass the annual budget Resolutions (the resolution pertaining to TCL&P will be handed out at the Board meeting since it will not be approved until the City Commission meeting, a day preceding the TCL&P board meeting) that authorizes the Light & Power Board to adopt the budget and capital plan it submitted for their consideration of approval, as required by City Charter. As a final step in the budget process, it is now appropriate for the Board to formally adopt the budget documents for the 2016-17 fiscal year.

This item is appearing on the Consent Calendar as staff deems it to be a non-controversial housekeeping matter, and recommends the Board adopts the 2016-17 operating budgets for the Electric and Fiber Optic Funds, and the Six Year Capital Improvements Plan. 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 FORMALLY ADOPTS THE 2016-17 OPERATING BUDGETS FOR THE ELECTRIC UTILITY AND FIBER OPTIC FUNDS AND THE SIX YEAR CAPITAL IMPROVEMENTS PLAN.



**TRAVERSE CITY
LIGHT & POWER**

To: Light & Power Board
From: Tim Arends, Executive Director
Date: June 2, 2016
Subject: Garland Street Agreement for Underground Costs and Decorative Poles, Arms and Fixtures

At the April 26, 2016 Regular Meeting the Board approved an amendment to the six year capital plan to authorize the extension of the lighting system to include Garland Street Decorative Lighting in the amount of \$169,000, more or less, for the underground costs of the system.

Once the project is approved, the next step is for the Board to approve an agreement, similar to the one approved for the West Front Street Project, which will cover the services provided by the City on behalf of TCL&P relating to the underground costs of the decorative lighting system.

Since Board approval of amending the capital plan to include the Garland Street Decorative Lighting underground costs, staff solicited bids for the Garland Street decorative light poles, arms and fixtures and in accordance with the current Decorative Lighting Policy. Four vendors submitted bids that were opened on May 26, 2016. Three vendors provided street light poles that require foundations to be poured while one vendor, The Stress Crete Group, provided the option of a direct bury pole. Staff has included the quoted cost from Elmers for the foundation costs of \$1,202.26 per street light for the non-direct bury poles. The results of the bids are as follows:

<u>Vendor</u>	<u>Bid Amount</u>	<u>Foundation Costs</u>	<u>Total</u>
Electra	\$34,930.00	\$16,831.64	\$51,761.64
Top Line Electric (including labor)	\$80,231.48	\$16,831.64	\$97,063.12
PowerLink Electrical	\$33,494.30	\$16,831.64	\$50,325.94
The Stress Crete Group	\$41,650.00	\$ -	\$41,650.00

Top Line Electric was a lump sum bid that included labor, and after further discussion with this vendor the price of the fixtures still exceeded the other bidders and an itemized bid was not provided.

Staff recommends moving forward with issuing a purchase order to The Stress Crete Group, the direct bury pole vendor and overall low bidder taking into consideration foundation costs. It is planned that TCL&P will order and pay for the decorative light poles, arms and fixtures with reimbursement to be made from the City for the total costs. The bid amount may be amended in the future, because of minor change requests made by the City/DDA that are currently being researched. The reimbursement will be incorporated into the agreement between the City and TCL&P and subject to approval by General Counsel.

FOR THE LIGHT & POWER BOARD MEETING OF JUNE 7, 2016

Staff recommends approval of the agreement and purchase order for the decorative light poles, arms and fixtures. This item is on the Consent Calendar as it is deemed non-controversial. 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 BOARD AUTHORIZES THE CHAIRMAN AND SECRETARY TO ENTER INTO AN AGREEMENT WITH THE CITY OF TRAVERSE CITY TO PROVIDE FUNDING FOR THE UNDERGROUND COSTS OF THE GARLAND STREET DECORATIVE LIGHTING SYSTEM IN THE AMOUNT OF \$169,000, MORE OR LESS, SUBJECT TO APPROVAL AS TO SUBSTANCE BY THE EXECUTIVE DIRECTOR AND AS TO FORM BY GENERAL COUNSEL. IN ADDITION, THE BOARD AUTHORIZES THE EXECUTIVE DIRECTOR TO ISSUE A PURCHASE ORDER TO THE STRESS CRETE GROUP IN THE NOT TO EXCEED AMOUNT OF \$41,650, MORE OR LESS, FOR DECORATIVE LIGHT POLES, ARMS AND FIXTURES TO BE REIMBURSED BY THE CITY.



TRAVERSE CITY
LIGHT & POWER

To: Light and Power Board
From: Karla Myers-Beman, Controller
Date: May 25, 2016
Subject: 2016-2017 Insurance Renewal

The Michigan Municipal League (MML) has submitted its proposal for liability and property insurance for fiscal year 2016-2017 in the amount of \$73,048. Attached is an Executive Overview from MML describing their company, the insurance process, and a list of benefits of pooling with MML.

This year there is an increase of 8.16% or \$5,512. The premium increase was caused from the City's experience loss modification factor increasing, addition of the final costs for South and East Hammond Substations, and the addition of the newly constructed covered storage area building.

2009-10 - \$ 75,564
2010-11 - \$ 69,781
2011-12 - \$ 61,214
2012-13 - \$ 63,392
2013-14 - \$ 64,995
2014-15 - \$ 65,715
2015-16 - \$ 67,536
2016-17 - \$ 73,048

Similar to last year, the pool will be providing a dividend return in July/August period in the amount of \$51,032. Last year the dividend return was \$56,608 and the TCL&P received \$9,272.65.

This item is on the Consent Calendar as it is deemed non-controversial. Staff recommends that the Board accept this proposal and authorize payment to MML for the 2016-2017 property & liability insurance premium. 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 JUNE 7, 2016

MOVED BY _____, SECONDED BY _____,

THAT THE LIGHT AND POWER BOARD APPROVES PAYMENT TO THE MICHIGAN MUNICIPAL LEAGUE LIABILITY AND PROPERTY POOL IN THE AMOUNT OF \$73,048 FOR FISCAL YEAR 2016-2017 LIABILITY AND PROPERTY INSURANCE.

May 24, 2016

Karla Myers-Berman, Controller
Traverse City Light & Power


Re: Traverse City Light and Power Renewal Premium for 2016-2017.

TCLP's renewal premium represents an increase of \$5,512. The premium increase is primarily due to the City's experience loss modification factor increasing from .952 in 2015 to 1.048 in 2016 and MML property rates increasing four cents due to the Pool's property loss experience. Also, TCLP increased their substation property values \$1.6 million dollars.

Line of Coverage	2015-2016 Premium	2016-2017 Premium	2015-2016 Deductible	2016-2017 Deductible
General Liability	\$13,683	\$15,055	\$0	\$0
Errors & Omissions	\$15,531	\$13,364	\$0	\$0
Property	\$24,023	\$25,514	\$5,000	\$5,000
Excess Liability 5 million	\$7,149	\$9,557	N/A	N/A
Excess Liability 3 mm x 2 mm	\$7,150	\$9,558		
Total	\$67,536	\$73,048.		

The Michigan Municipal League Liability and Property Pool appreciate your 31 years of membership and we are committed to providing you with the best comprehensive coverage and service.

Sincerely,



Connie M. Monson
MML Account Executive

Service Provider: Meadowbrook Insurance Group, Inc.

Loss Control & Member Services: P.O. Box 2054, Southfield, MI 48037-2054; (248) 358-1100; (800) 482-0626; Fax: (248) 358-0534
Grand Rapids Claims: 3501 Lake Eastbrook S.E., Suite 150, Grand Rapids, MI 49546-5939; (616) 942-0311; (800) 752-7477; Fax: (616) 942-0390



michigan municipal league

Liability & Property Pool

Proposal

for the

City of Traverse City

Presented By:

Connie Monson
Meadowbrook Insurance Group
(877)370-8892

May 23, 2016

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This proposal is intended to be only a summary of coverages and services. For specific details on coverage terms and conditions, please refer to the Michigan Municipal League Liability and Property Pool coverage document.

Executive Overview

The Michigan Municipal League Liability and Property Pool is administered by the Risk Management staff of the Michigan Municipal League, and serviced by Meadowbrook Insurance Group. Since 1982, the Pool has been a stable source of comprehensive municipal insurance and risk management services. It is financially secure and positioned for long-term stability.

The **City of Traverse City** has been a Pool member since **1985**.

The League administrative staff and the dedicated Pool staff at Meadowbrook Insurance Group are municipal insurance experts. Municipal risk management is our only business, and we're proud of it!

The Pool provides insurance coverage designed specifically for Michigan municipal exposures, combined with a package of loss control programs, claims administration, legal defense and membership services that you won't find anywhere else in Michigan.

This quotation is based on the limits of coverage requested by the **City of Traverse City**. Higher limits may be available, subject to underwriting review by Pool Management. Please submit requests for higher limits in writing to your Account Executive. Your request will be considered by Pool Management.

The insurance and related services described more fully in this proposal are being offered to the **City of Traverse City** for an annual premium of **\$430,019**.

City of Traverse City **\$356,971**
Traverse City Light & Power **\$73,048**

MML Dividend: The MML Liability & Property Pool Board of Trustees voted to return another post-renewal dividend for Members renewing in 2016. The City of Traverse City's portion of the dividend return is **\$51,032**. The City will receive this dividend in the month following payment of your 2016 renewal premium.

Thank you for being a Pool member. We look forward to servicing your risk management program for many years to come.

Our Mission

To be a long-term, stable, cost-effective risk management alternative for members of the Michigan Municipal League Liability and Property Pool.

Introduction

What You Can Expect Of Us

- ✓ A commitment to learn, understand and respond to your insurance needs;
- ✓ Continuous planning and innovation in product development and service delivery;
- ✓ Products that meet your needs in terms of price, coverage and service;
- ✓ Prompt, accurate, and courteous response to your questions, problems and claims; and
- ✓ Knowledgeable and professional staff serving your needs consistently and with integrity.

Your Pool Insures More Than . . .

- | | |
|---------------------------------|-------------------------------------|
| ✓ 414 Public Entity Members | ✓ 6,617 Vehicles |
| ✓ 140 Fire Departments | ✓ 19 Electric Utilities |
| ✓ 175 Law Enforcement Agencies | ✓ 27 Municipal Marinas |
| ✓ 2,217 Police Officers | ✓ \$4.15 Billion of Property Values |
| ✓ 5,742 Miles of Streets/Roads | ✓ 195 Water Service Operations |
| ✓ 195 Water Utilities | ✓ 215 Sewer Plant Operations |
| ✓ \$5 Billion of Property Value | |

These local communities are current Pool members:

City of East Jordan
City of Manistee
City of Harbor Springs

Coverage and Cost Summary City Of Traverse City

Effective 07-01-2016 to 07-01-2017

Coverages	Limit of Liability	Aggregate Limit	Per Occurrence Deductible
Municipal General Liability (Coverage A)	\$5,000,000	N/A	\$0
Fireworks-7/4/2015 & 7/11/2015	\$1,000,000	N/A	\$0
Grand Traverse County for Inspection Services	\$5,000,000	N/A	\$0
Grand Traverse Ski Club	\$5,000,000	N/A	\$0
Great Lakes Railroad Boardman lake Trail-Railroads MML235	\$5,000,000	N/A	\$0
Great Lakes Railroad Mile Marker 25 Contractual Liability -Railroad MML 235	\$5,000,000	N/A	\$0
Traverse City DDA A/I	\$5,000,000	N/A	\$0
Traverse City Light and Power	\$5,000,000	N/A	\$0
Light & Power Payroll	\$5,000,000	N/A	\$0
Sewer Back-Up Sublimit	No Coverage	N/A	N/A
Personal Injury Liability (Coverage B)	\$5,000,000	N/A	\$0
Medical Payments (Coverage C)	\$10,000	N/A	N/A
Public Officials Liability (Coverage D)	\$5,000,000	N/A	\$0
Traverse City Light & Power	\$5,000,000	N/A	\$0
Traverse City DDA A/I	\$5,000,000	N/A	\$0
Law Enforcement Liability (Coverages A, B, and D)	\$5,000,000	N/A	\$0
Employee Benefit Liability	\$1,000,000	\$1,000,000	\$0
Fire Legal Liability	\$100,000	N/A	N/A
Cyber Liability (Coverages A, B, and D)	\$25,000	\$50,000	N/A
Dam Liability	No Coverage	N/A	N/A
Marina Operator Liability	No Coverage	N/A	N/A
Automobile Liability (Coverages A and B)	\$5,000,000	N/A	\$0
# Vehicles	119	Comp	\$500
Coll	\$1,000		

Agreed Amount, if applicable 5 Vehicles for a total of \$2,819,300

Coverages A, B, and D are provided with a combined single limit of liability. The most the Pool will pay for any one occurrence is \$5,000,000 regardless of the number of coverages involved in the occurrence.

Property

Property - Blanket Basis	\$148,202,221	N/A	\$5,000
Boiler and Machinery	Included	N/A	\$5,000
Building(s)	Included	N/A	\$5,000
Cemetery Property - up to \$500 per headstone	# Plots: 25,000	N/A	\$5,000

Coverage and Cost Summary

City Of Traverse City

Effective 07-01-2016 to 07-01-2017

Coverages	Limit of Liability	Aggregate Limit	Per Occurrence Deductible
Contents	Included	N/A	\$5,000
Property in the Open	Included	N/A	\$5,000
Protection & Preservation	Included	N/A	N/A
Property - Actual Cash Value	See Schedule	N/A	\$5,000
Property - Limited Replacement Cost	N/A	N/A	N/A
Property - No Coverage	See Schedule	N/A	N/A
Property - Replacement Cost	See Schedule	N/A	\$0
2007 German Shepherd, ZUK	\$10,000	N/A	\$1,000
2009 German Shepherd, LUK	\$10,000	N/A	\$1,000
Accounts Receivable	\$100,000	N/A	\$1,000
Consequential Damage	\$100,000	N/A	N/A
Contractor's Equipment	\$3,262,000	N/A	\$1,000
Debris Removal - the lesser of 25% of physical damage loss or	\$5,000,000	\$5,000,000	N/A
Demolition & Increased Costs of Construction Limit	\$100,000	N/A	N/A
Earth Movement	\$2,000,000	\$2,000,000	\$5,000
Electronic Data Processing Equip	\$998,234	\$998,234	\$1,000
Expediting Expense	\$100,000	N/A	N/A
Extra Expense	\$400,000	N/A	N/A
Fine Arts	\$1,050,000	N/A	\$1,000
Fire Department Boats	\$89,000	N/A	\$1,000
Fire Equipment	\$1,685,876	N/A	\$1,000
Firearms Shooting Simulator	\$40,000	N/A	\$1,000
Flood (Except for Members located in Flood Zone A, AO, AH, A1-A999, AE, or AR)	\$1,000,000	\$1,000,000	\$5,000
Fungal Pathogens	\$25,000	\$25,000	\$1,000
Loss of Income	\$250,000	N/A	N/A
Loss of Rents	\$100,000	N/A	N/A
Lumex Lite Mercury Vapor Analyzer	\$17,000	N/A	\$1,000
Ornamental Trees, Shrubs, Plants or Lawn	\$5,000	\$10,000	\$1,000
Personal Effects & Property of Others	\$500	\$2,500	\$1,000
Tools at Cemetery	\$41,715	N/A	\$1,000
Valuable Papers	\$125,000	N/A	\$1,000
Voting Equipment	\$119,885	N/A	\$1,000

Comprehensive Crime Coverage

Coverage and Cost Summary City Of Traverse City

Effective 07-01-2016 to 07-01-2017

Coverages	Limit of Liability	Aggregate Limit	Per Occurrence Deductible
Employee Dishonesty Blanket/Faithful Performance	\$100,000	N/A	N/A
Depositors Forgery	\$100,000	N/A	N/A
Money and Securities Inside	\$100,000	N/A	N/A
Money and Securities Outside	\$100,000	N/A	N/A
Money Orders and Counterfeit Paper	\$100,000	N/A	N/A
Bonds			
Bond #: A Treasurer	\$250,000	N/A	N/A
Bond #: B Deputy Treasurer	\$100,000	N/A	N/A
Bond #: C Cashier Clerk #1	\$100,000	N/A	N/A
Bond #: D Cashier Clerk #2	\$100,000	N/A	N/A
Bond #: E Cashier Clerk #3	\$100,000	N/A	N/A

Only one deductible applies to claims involving two or more property coverages.

The Michigan Municipal League Liability and Property Pool is pleased to offer all coverages and services described in this proposal for an annual premium of \$430,019.

Your Team of Experts



Connie Monson
MML Account Executive
(231) 276-6499



Michael J. Forster
Pool Administrator
(734) 669-6340



Ellen Skender
248-204-8582

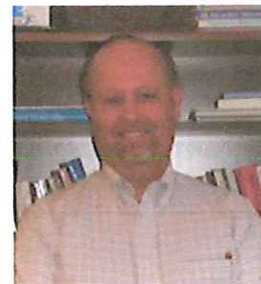


Joan Opett
248-204-8579

Customer Service Representatives



Tom Weed
Claims Supervisor
(616) 942-0311, ext. 4123



Rod Pearson
Loss Control Supervisor
(248) 204-8036

Benefits of Pooling with the MML

- ✓ Proven long-term availability and stability
- ✓ Broad coverage document written specifically for Michigan municipalities
- ✓ Services tailored to unique needs of Michigan municipalities
- ✓ Member assets controlled by an elected Board of municipal officials
- ✓ Equitable rating based on Pool experience in Michigan
- ✓ Aggressive defense strategy – positive impact on case law
- ✓ Professional, dedicated, and experienced local management, oversight and service
- ✓ Decisions made and problems resolved by a group of your peers
- ✓ Investment income and underwriting surplus used to benefit members
- ✓ Lower expenses through tax-exempt and non-profit status
- ✓ Special loss avoidance training sessions including:
 - ✓ Safety aspects of emergency vehicle operations
 - ✓ Accident investigation for supervisors
 - ✓ Confined spaces training

The advantages of pooling can be summarized by:

Service + Control + Value

The City of Traverse City Has . . .

- ✓ \$10,229,182 Annual Payroll
- ✓ \$148,202,221 of total values for real and personal property
- ✓ 29 Law enforcement officers
- ✓ 119 Vehicles
- ✓ 5 Fire/Rescue Vehicles with agreed values

Increased Liability Limits

We cannot guarantee the adequacy of any limit of liability. Due to the following factors, it may be prudent to consider higher limits:

- ✓ Increased jury awards in your jurisdiction
- ✓ Increased litigation trends
- ✓ Protection of tax base against judgments in excess of your policy limits

If you are interested in increasing your liability limits, please contact your Account Executive.

Highlights of Coverages Provided

Who Is Insured?

The Pool member entity, elected and appointed officials, employees and authorized volunteers, and any person officially appointed to a Board or Commission

General Liability

In addition to standard liability coverages (bodily injury, property damage, products and completed operations) the Pool provides coverages that municipalities need on an **occurrence basis with no aggregate liability limits**:

- ✓ Liability resulting from mutual aid agreements
- ✓ Premises medical payments
- ✓ Host liquor liability
- ✓ Watercraft liability, owned less than 26' and non-owned less than 50'
- ✓ Special events **excluding** -
 - Fireworks (unless endorsed)
 - Liquor Liability
 - Mechanical Amusement Rides
- ✓ Fire legal liability for real property
- ✓ Ambulance and EMT malpractice

Fireworks Coverage Options: (Fireworks application must be completed before coverage is endorsed)

1. The MML Liability & Property Pool is primary (the Member is not added as an additional insured on a pyrotechnician's coverage):

Annual Aggregate Sublimit	Additional Premium
\$500,000	Yes
\$1,000,000	Yes

2. The MML Liability & Property Pool is excess (the Member is added as an additional insured on a pyrotechnician's coverage):

NO ADDITIONAL PREMIUM

- ✓ Athletic participation liability
- ✓ Employee benefit liability
- ✓ Cemetery operations coverage
- ✓ Marina Operators coverage available
- ✓ Up to \$10 million in liability limits available
- ✓ Pollution coverage for Hazardous Response Teams
- ✓ Cyber Liability Coverage Sublimit—MML233 (07/13)

General Liability Exclusions . . .

The following is a partial list of general liability coverage exclusions. Consult the coverage document for the complete listing:

- ✓ Pollution (except for Hazmat operations).
- ✓ Nuclear energy / nuclear material hazards
- ✓ Aircraft Liability
- ✓ Breach of contract
- ✓ Failure of dams
- ✓ Backup of Sewers and Drains (exception -- \$100,000 Annual Aggregate Sublimit for Sewer and Drain Liability)
- ✓ Criminal activity / Intentional acts with knowledge of wrongdoing
- ✓ Contractual Liability
- ✓ Failure to supply utilities
- ✓ Expected or intended injury
- ✓ Electromagnetic radiation
- ✓ Medical malpractice for doctors and physicians

Public Officials Liability Coverage

"Wrongful Acts", including intentional acts, defined as any actual or alleged error, misstatement, act of omission, neglect or breach of duty including:

- ✓ Neglect of duty
- ✓ Zoning defense and land use litigation
- ✓ Malfeasance
- ✓ Violation of civil rights
- ✓ Discrimination
- ✓ Employment practices
- ✓ Misfeasance
- ✓ Cable TV broadcasting

Public Officials Liability Exclusions

The following is a partial list of public officials' liability coverage exclusions. Consult the coverage document for the complete listing:

- ✓ Pollution and Nuclear Energy
- ✓ Fraud, dishonesty, intentional and criminal acts
- ✓ Failure to purchase coverage or adequate coverage
- ✓ Return of governmental grants or subsidies
- ✓ Intentional acts with knowledge of wrongdoing
- ✓ Eminent domain / takings
- ✓ Illegal profit
- ✓ Labor union actions
- ✓ ERISA violations
- ✓ Backup of Sewers and Drains

Personal Injury & Advertising / Broadcasters Liability Coverage

- ✓ Mental anguish and stress
- ✓ Libel, slander or defamation of character; violation of an individual's right of privacy
- ✓ Proactive services for non-monetary damage claims

Police Professional Liability Coverage

Police Professional Liability coverage is contained within the General Liability and Public Official Liability Coverage Parts

- ✓ Discrimination
- ✓ Assault or battery
- ✓ Violation of civil rights
- ✓ Improper service of suit
- ✓ Jail operations
- ✓ Coverage assumes officers act with intent
- ✓ False arrest, detention or imprisonment, or malicious prosecution
- ✓ Wrongful entry or eviction or other invasion of the right of private occupancy

Property Coverage

In addition to covering buildings, contents and personal property, the Pool provides:

- ✓ Blanket coverage -- All member-owned property insured (unless specifically excluded)
- ✓ Coverage based on ownership rather than on a "schedule on file" avoids coverage gaps due to errors or oversight
- ✓ Property of others in custody of the Member for which the Member has an obligation to provide coverage
- ✓ Boiler & Machinery coverage, including Boiler certification inspections
- ✓ Replacement Cost or Actual Cash Value available
- ✓ Fungal Pathogens (Mold) Limited Coverage
- ✓ Demolition/increased cost of construction
- ✓ No coinsurance
- ✓ Valuable papers
- ✓ Loss of Rents
- ✓ Property in the open
- ✓ Extra expense
- ✓ Expediting expense

Property Exclusions

The following is a partial list of property coverage exclusions. Consult the coverage document for the complete listing:

- ✓ Nuclear reaction/ contamination
- ✓ War
- ✓ Cyber Risk
- ✓ Fungal Pathogens (Mold) excess of sub-limit
- ✓ Failure to supply utilities
- ✓ Transmission Lines and Poles
- ✓ Dishonest acts
- ✓ Acts of Terrorism excess of Pool's Aggregate Sublimit -- MMLC TR (9/1/10)
- ✓ Wear and tear
- ✓ Computer failures/ viruses

Only one deductible applies to claims involving two or more property coverages.

Comprehensive Crime Coverage

- ✓ Employee Dishonesty/ Faithful Performance of Duty coverage provided on a blanket basis
- ✓ Loss Inside the Premises
- ✓ Loss Outside the Premises
- ✓ Money Orders/ Counterfeit Currency
- ✓ Depositors Forgery
- ✓ Position Fidelity Bonds

Automobile Coverage Highlights

What Is Covered?

Coverage is afforded while operating land motor vehicles, trailers or semi-trailers designed for travel on public roads.

Auto Coverages Provided

- ✓ Michigan No-Fault Coverage, includes mini-tort coverage for no extra charge
- ✓ Excess protection for use of personal automobile for municipal business
- ✓ Uninsured motorist for municipally owned vehicles
- ✓ Underinsured motorists
- ✓ Non-owned and hired auto
- ✓ Comprehensive - actual cash value basis
- ✓ Collision - actual cash value basis
- ✓ Volunteer firefighter auto accident liability coverage
- ✓ Agreed value coverage for emergency vehicles is available
- ✓ Fire or Rescue Vehicle Rental Reimbursement Coverage

Pool Risk Management Services

- ✓ Review and service of all municipal insurance matters
- ✓ Public entity experts address various liability issues
- ✓ Aggressive, member-oriented defense strategy
- ✓ Former police officials address law enforcement risks
- ✓ Physical inspection by municipal loss control engineers
- ✓ Law enforcement risk control programs (LEAF and LERC)
- ✓ Property appraisal services available

Online Services

www.mml.org (click on the *Insurance* button) – offers Pool members an outstanding resource for municipal risk management information and self-help tools in one attractive, simple-to-navigate location. File a claim on line. Download your renewal application. Request a loss control service visit. E-mail us a question. Other services available online:

- ✓ Online Forms (including Sewer Backup Sample Documents)
- ✓ Risk Resources:
 - ✓ Risk Control Solutions
 - ✓ Safety & Health Manual
 - ✓ Risk Management is Good Management Program
 - ✓ Law Enforcement Newsletters
 - ✓ Access to Safetysurance website -- <http://www.safetysurance.com/>
- ✓ MML Pool Audited Financial Statements
- ✓ Intergovernmental Contract
- ✓ Board of Directors, Pool Administrator and Staff Profiles and Contact Information

Membership Responsibilities

Membership in the Michigan Municipal League Liability and Property Pool provides numerous benefits. Likewise, individual members have certain responsibilities to the other members, which are detailed in the Intergovernmental Contract. The following is a summary of the membership responsibilities. Please refer to the Intergovernmental Contract, Articles 5 and 6, for more information.

- ✓ If a Member intends to leave the Pool, the Member must send a written notice to the Pool at least 60 days prior to its next renewal date.
- ✓ A Member must pay its premium when due. The Pool must give each member 20 days written notice of intent to terminate membership for nonpayment of premium. Payment of premium before the 20 days notice is effective will entitle the Member to reinstatement.
- ✓ Members must maintain membership or associate membership status in the Michigan Municipal League.
- ✓ A Member will allow attorneys employed by the Pool to represent the Member in defense of any claim made against the Member within the scope of coverage provided by the Pool. A Member will cooperate with the assigned attorneys, claims adjusters, service company or other agents of the Pool relating to the defense of claims for which the Pool is providing coverage.
- ✓ A Member will follow loss reduction and prevention measures established by the Pool.
- ✓ A Member will report to the Pool as promptly as possible all incidents that the Member reasonably believes may result in a claim against the Member.



**TRAVERSE CITY
LIGHT & POWER**

To: Light & Power Board
From: Tim Arends, Executive Director
Date: June 7, 2016
Subject: Wind Contract

Michigan Public Power Agency (“MPPA”) has negotiated a wind contract located in the thumb area with a leading edge renewable developer with substantial experience in developing projects throughout North America. The contract is for 61 MW aggregate capacity of output with a firm price power purchase agreement and an overall leveled price below \$50 per MWh over a twenty year term, or a total maximum exposure of contract cost in the amount of \$11,945,079.58, not taking into consideration the time value of money. TCL&P’s proposed share of this agreement is 5.8% of all energy, capacity, and Environmental Attributes (MIRECS - requirements to meet the State of Michigan renewable energy requirements) under the agreement that will provide an expected generation output of 12,614 MWh’s. (Information on this wind contract was initially presented at the November 24, 2015 board meeting with supplemental information provided in the April 26, 2016 board packet.)

Staff retained RTD Consulting, LLC (“RTD”) to perform an independent analysis on this wind contract. In summary, RTD’s recommendation was to pursue the project based on the fact that the potential increase in REC’s is reasonable given the current level of discussion within the State of Michigan. The cost of the project appears to be at a level that will not raise the average cost of purchased power to TCL&P. The recommendation to proceed should be followed with caution until MPPA has a final contract and all of the operating and financial parameters are known.

Staff internally analyzed the impact of this contract on the wholesale costs of power in two different scenarios: first, the impact of the wind contract if it was operational in the 2014 and 2015 calendar year and secondly, if it was operational based on the operation date disclosed within the contract. This was completed to provide the Board a historical (actual costs) and futuristic (estimated load/costs) perspective on the impact it will have on the wholesale power cost and the power service cost recovery rate passed through to the utility’s customers.

In this analysis, Stoney Corner’s 2014 and 2015 generation data was used and adjusted accordingly for the variation in generation output between the two wind projects. The results of the analysis showed if this was contractually in operation in the calendar year 2014 the wholesale power costs would have decreased (\$73,861.62) or (\$.2393) per MWh because the actual purchase power price costs was below the average cost of the day ahead market at \$47.59 per MWh and the real time market at \$59.77 per MWh. It is important to know in the 2014 calendar

FOR THE LIGHT & POWER BOARD MEETING OF JUNE 7, 2016

year market prices were higher than normal because of the impact the Polar Vortex had on the market the first few months of 2014.

In 2015 the wholesale power costs would have increased \$165,514.30 or \$.5027 per MWh, this change reflects the actual purchase power price costs was above the average day ahead market at \$29.31 per MWh and the real time market at \$48.89 per MWh. In this case the 2015 calendar year was a relatively low year for market prices.

If this project were to become operational based on the scheduled contract date the estimated increase in wholesale power costs for the first five years would range from \$135,964.75 to 143,573.00 or \$.3943 per MWh. MPPA ran an independent analysis using the generation from the Beebe wind farm located in the thumb area and calculated an impact on our wholesale power cost of \$.33 per MWh, which appears reasonable when compared to staff's analysis based on literature that the thumb area is the prime location for wind energy and the amount of wind farms constructed in the area.

Overall, staff conservatively used the low market price from 2015 and escalated it by 2% each year for the analysis. If the market price were to raise it would only benefit the utility as it would lower the premium and may even become a discount like the 2014 year between the wind contract and the market. Staff feels the information provided is the maximum amount the contract would impact the wholesale power of cost and costs passed through the power service costs recovery rate onto the utility's customers.

This analysis did not take into consideration the value of capacity costs since the capacity recognized by MISO will be most likely be minimal, and the value of the RECS was not included at this point because future legislation is only proposed regarding renewable requirements.

Lastly, MPPA will be at the board meeting to present on the wind contract and their PowerPoint presentation is included for review in the packet following RTD's analysis.

Staff is requesting authority for the utility's designated member representative of the MPPA & TCL&P Energy Services Agreement, the Executive Director, to sign the letter of authorization for the project purchase commitment.

MOVED BY _____, SECONDED BY _____,

**THE BOARD AUTHORIZES THE DESIGNATED MEMBER REPRESENTATIVE OF
THE MPPA & TCL&P ENERGY SERVICES AGREEMENT, THE EXECUTIVE
DIRECTOR, TO SIGN MPPA'S LETTER OF AUTHORIZATION FOR THE WIND
ENERGY PURCHASE POWER COMMITMENT.**



RTD CONSULTING, LLC

May 18, 2016

Mr. Timothy J. Arrends
Executive Director
1131 Hastings St.
Traverse City, MI 49686

Re: wind Farm Project

Dear Tim,

As you requested, I have reviewed the information you provided from MPPA wind farm project. I have also updated the original spreadsheet I provided in my 11/11/2015 memo. With the new information, I relooked at the analysis provided and have the following comments.

Discussion:

1. **REC Requirements:** The revised analysis provided by MPPA use 20% REC requirement. There is no stated rationale for this increase. Without some compelling reason to increase this target from 15% to 20% it becomes an economic argument. However, if the average cost of the avoided energy is the same or very close to the proposed project then the "green energy" is not a premium cost and may be preferable from a policy perspective.

Another consideration is the prospect of the availability of solar energy. While it will be more expensive than the project, it will be energy that will be available only during daylight hours and may be competitive with the average MISO LMP's during daylight hours. It will likely have a higher capacity credit from MISO. This is an emerging technology that may fit into the resource mix if TCL&P still has a need for additional RECs.
2. **Reduction of NANR Additions:** MPPA reduced the available energy from the NANR as they do not think the additional 2.8 MW, which TCL&P will have an 8% interest in will be built. This will increase the need for additional RECs from other projects. This is reflected in Table 1 below.

3. Economic analysis: I have repeated the analysis provided in the 11/11/2015 memo as it is unchanged.

The economic evaluation provided by MPPA shows the cost of the project over the 20 year life of the PPA. This projection is less than the expected cost of energy from MISO, provided Renewable Energy Credits (REC) and Capacity Credits are as forecasted. While the analysis is reasonable it may be somewhat optimistic. In discussions with MPPA staff, they acknowledge this issue but as there is not available data that can be used to directly calculate the actual output from the proposed project, they used a proxy of the Beebe project. Also used is a "multiplier" that allows for a comparison of MISO rates and the cost of the project. This multiplier allows sensitivity analyses to gauge the financial risk of the project.

In short, the cost of the project does not appear to increase the cost of wholesale power.

4. Energy Forecast: Based on the forecast provided by MPPA Table 1 shows TCL&P will meet the REC's target at 10%. The 15% target would require 4.5-5.0MW depending on the capacity factor of the project. Should the 20% target be used, the additional capacity would require 8.5-9.0 MW, again depending on the capacity factor of the project.

Table 1

	Energy Requirements see note 1	MPPA Renewables	Heritage	Proposed Project	Total Renewables MWh	REC Target @10%	% Over/Under Target	REC Target @15%	% Over/Under Target	REC Target @20%	% Over/Under Target
2016	336,166	10331	26280		36611	33,617	8.9%	50,425	-27.4%	67,233.2	-45.5%
2017	336,908	10331	26280	17520	54131	33,691	60.7%	50,536	7.1%	67,381.5	-19.7%
2018	337,951	10331	26280	17520	54131	33,795	60.2%	50,693	6.8%	67,590.3	-19.9%
2019	339,218	10331	26280	17520	54131	33,922	59.6%	50,883	6.4%	67,843.7	-20.2%
2020	340,646	10331	26280	17520	54131	34,065	58.9%	51,097	5.9%	68,129.3	-20.5%
2021	342,169	10331	26280	17520	54131	34,219	58.2%	51,328	5.5%	68,437.9	-20.9%
2022	343,822	10331	26280	17520	54131	34,382	57.4%	51,573	5.0%	68,764.3	-21.3%
2023	345,529	10331	26280	17520	54131	34,553	56.7%	51,829	4.4%	69,105.8	-21.7%
2024	347,305	10331	26280	17520	54131	34,731	55.9%	52,096	3.9%	69,461.0	-22.1%
2025	349,138	10331	26280	17520	54131	34,914	55.0%	52,371	3.4%	69,827.6	-22.5%
2026	351,028	10331	26280	17520	54131	35,103	54.2%	52,654	2.8%	70,205.6	-22.9%
2027	352,964	10331	26280	17520	54131	35,296	53.4%	52,945	2.2%	70,592.8	-23.3%
2028	354,942	10331	26280	17520	54131	35,494	52.5%	53,241	1.7%	70,988.5	-23.7%
2029	355,964	10331	26280	17520	54131	35,696	51.6%	53,545	1.1%	71,392.8	-24.2%
2030	359,014	10331	26280	17520	54131	35,901	50.8%	53,852	0.5%	71,802.8	-24.6%
2031	359,014	10331		17520	27851	35,901	-22.4%	53,852	-48.3%	71,802.8	-61.2%
2032	359,014	10331		17520	27851	35,901	-22.4%	53,852	-48.3%	71,802.8	-61.2%
2033	359,014	10331		17520	27851	35,901	-22.4%	53,852	-48.3%	71,802.8	-61.2%
2034	359,014	10331		17520	27851	35,901	-22.4%	53,852	-48.3%	71,802.8	-61.2%
2035	359,014	10331		17520	27851	35,901	-22.4%	53,852	-48.3%	71,802.8	-61.2%
2036	359,014	10331		17520	27851	35,901	-22.4%	53,852	-48.3%	71,802.8	-61.2%

Notes:

- 1) Energy forecast is the MISO energy forecast prepared by MPPA in Oct 2015. The years 2031-2036 are extended using average growth over the 2015-2030 period.

2771 Monument Rd., Ste. 29 Box 337, Jacksonville, FL 32225
 904-607-1875 |
 BobD@RTDConsultingllc.com | RTDConsultingllc.com

Conclusions:

The conclusion remains essentially unchanged from the 11/11/2015 memo. These are restated below for convenience.

This project should be pursued with MPPA at the level proposed by MPPA (3.32Mw). This amount could be increase to 6Mw if needed if the economic parameters remain as stated. The potential for an increase in REC's is reasonable given the current level of discussion within the State of Michigan. The cost of this project appears to be at a level that will not raise the average cost of purchased power to TCL&P. It also adds another tier of REC's with a different expiration date than existing REC's. However, this alone will not be sufficient to meet a 15% REC's requirement. Therefore, additional REC's will need to be pursued.

Given _____ has increased the proposed project's capacity factor to 40%, 5MW will reach the REC's target of 15%. The ultimate level of additional REC's purchased will be a matter of the Boards view of their desire to be "green" and the likelihood that the REC's requirements are going to be increased above the current 10% requirement. Based on the data provided this is an economic neutral decision.

Please let me know if you need any additional information.

Sincerely,


R. T. Dyer
President

Traverse City Light and Power
 Summary of Proposed Wind Contract - Utilizing Current Information
 June 2016

	BASED ON MPPA'S FIVE YEAR PLAN FORECAST			
	2014	2015	2016	2017
Wholesale Cost of Power	\$ 22,786,661.97	\$ 22,158,695.47	\$ 22,656,631.91	\$ 22,422,465.72
Calendar Year kWh's	308,695,779	329,235,998	336,165,014	336,906,628
Average Cost of Wholesale Power per MWh	\$ 73.8159	\$ 67.3034	\$ 67.3974	\$ 66.5539
				\$ 65.4154

	IMPACT OF WIND PROJECT ON WHOLESALE COST OF POWER			
	2014	2015	2016	2017
Wholesale Cost of Power	\$ 22,786,661.97	\$ 22,158,695.47	\$ 22,656,631.91	\$ 22,422,465.72
Addition of Proposed Wind Contract	523,985.56	523,985.56	531,806.24	539,879.20
Estimated Revenues of Proposed Wind Contract	(597,847.18)	(358,471.26)	(365,640.69)	(372,953.50)
New Total Wholesale Cost of Power	\$ 22,712,800.35	\$ 22,324,209.77	\$ 22,822,797.46	\$ 22,589,391.42
Calendar Year kWh's	308,695,779	329,235,998	336,165,014	336,906,628
Estimated Average Cost of Wholesale Power per MWh	\$ 73.5766	\$ 67.8061	\$ 67.8916	\$ 67.0494
				\$ 65.9112

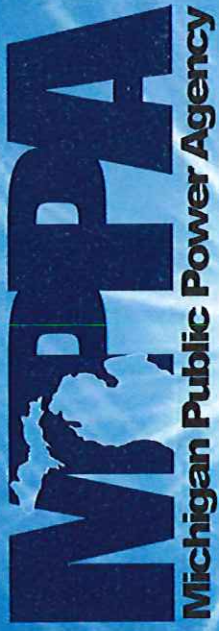
Difference per MWh	\$ (0.2393)	\$ 0.5027	\$ 0.4943	\$ 0.4955
(Discount)/Premium Cost of Renewable Energy	\$ (73,861.62)	\$ 165,514.30	\$ 166,165.55	\$ 166,925.70
				\$ 0.4958
				\$ 167,539.59

Average Day Ahead Market Price per MWh	\$ 47.59	\$ 29.31	\$ 23.88	Unknown
Average Real Time Market Price per MWh	\$ 59.77	\$ 48.89	\$ 23.57	Unknown

To date (5/16)

Notes/Assumptions

- 1) 2014/2015 based on actual calendar year numbers, remaining years based on MPPA's five year plan for wholesale cost of power and calendar year kWh's
- 2) Addition of proposed wind contract based on if the contract was operational in 2014 and the impact it would have on the current and future wholesale power costs.
- 3) Estimated Revenues was calculated based on past years actual data from Stoney Corner's wind farm and adjusting the output by the estimated output of the Huron Wind Project with a 2% escalator in 2017/2018 from the 2015 year because the 2014 year was abnormal due to the polar vortex.
- 4) Transmission costs were not included as TCL&P is not exposed to a significant amount because of the financial transmission rights owned.
- 5) Congestion fees are not included, because we do not feel it would have a material impact on the wholesale cost of power.
- 6) TC Node prices were utilized, however, the generation will be sold at the node located in the thumb area and may cause a difference, but the impact is expected to be minimal.



Michigan Public Power Agency

Wind Energy Supply Agreement



Why Wind Energy Supply?

- Wind Energy is the only large scale power supply resource remaining that protects our power portfolio against rising natural gas prices (coal & nuclear phased out)
- Federal Legislation passed in late 2015 phases out Renewable Energy production tax incentives over next 5 years (incentives translate into lower pricing for buyers)
- Federal Clean Power Plan and other Michigan & Federal legislation decarbonizing the power business make wind energy more valuable in the future
- Premier geographic locations for wind in the State of Michigan are limited
- Retail customers of our member systems want more renewable (large and growing portion of Fortune 500 Corporations have 100% renewable energy goal)
- Pricing is competitive (60% + decline in pricing in last decade for wind)

Electricity Production transformation

Financial Crisis in Coal

- April 13, 2016 - Peabody Energy Corp. – world's largest private sector coal producer - filed for U.S. Bankruptcy Protection
- Jan 11, 2016 – Arch Coal Inc., 2nd largest U.S. Coal producer filed for U.S. Bankruptcy Protection
- Aug 3, 2015 – Alpha Natural Resources Inc., 3rd largest supplier filed for U.S. Bankruptcy Protection
- 2015 – Walter Energy, Patriot Coal, Xinergy, etc., etc. all filed for Bankruptcy protection in the last 24 months

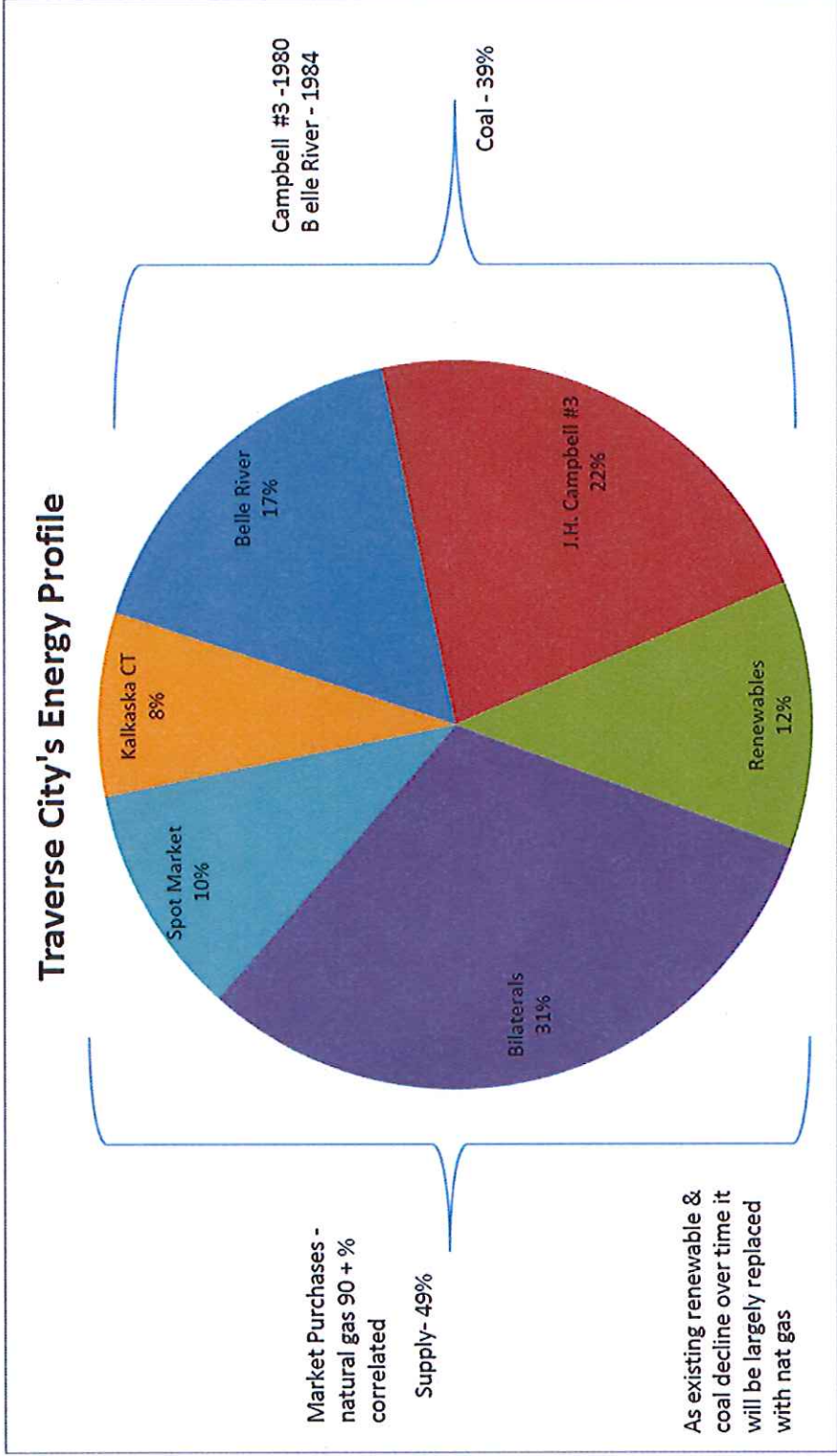
Natural Gas overtakes Coal

- EIA publishes that natural gas overtook coal as the top fuel for U.S. Power generators for 1st time ever over the 12 months ending January 2016



Power Supply Portfolio Composition

Wind plays valuable role in dampening future price risk as natural gas exposure increases

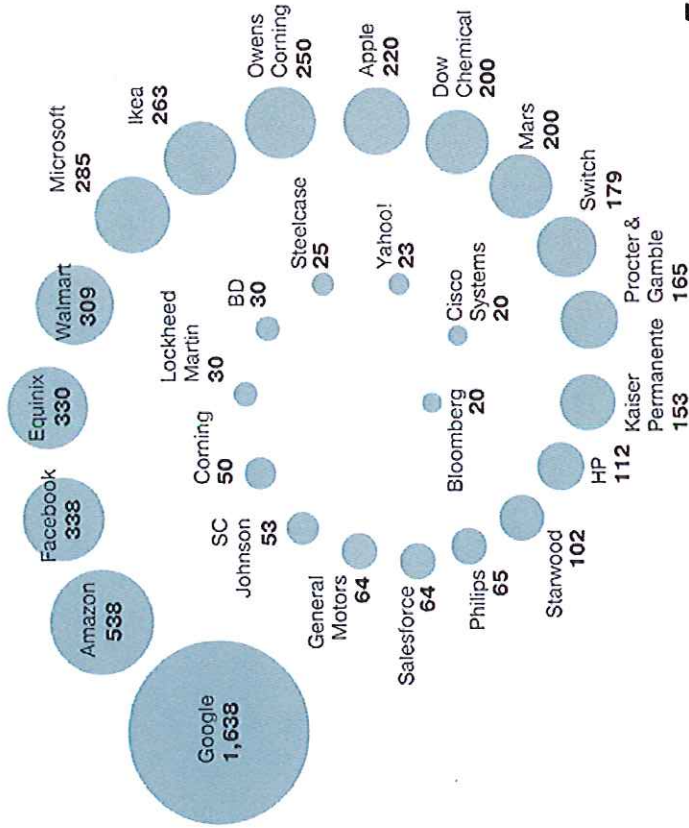


Most Valuable Global Corporations

Are executing Long-Term Wind Supply at an incredible pace

Top companies in total wind and solar capacity

Data in megawatts.



Direct PPA's – Corporate Buyer

- In 2015, corporate PPA's exceeded 50% of overall PPA Market in the United States— 3,500 MW
- Up from 23% in 2014 and 5% in 2013

Primary Rationale:

- Price Stability – known fixed price
- Sustainability Goals
- Greenhouse Gas Risk Management
- Long-Term Fuel Hedge

Economics Drive Long-Term Decisions

NG STAFF
SOURCE: ROCKY MOUNTAIN INSTITUTE BUSINESS RENEWABLES CENTER



Wind Supply Assessment Process

- MPPA experienced the benefits of joint action and economies of scale through execution of a Wind Energy Supply agreement in Gratiot County in 2013
- Performed member by member energy supply portfolio risk assessment in 2014 (meeting State Mandate RPS & forward fuel price risk sensitivities)
- Organized individual and aggregate member targets and began evaluating project opportunities in early 2015
- Evaluated & ranked resources on (a.) Project Quality Characteristics, (b.) Contract terms & conditions, (c.) Financial Requirements, (d.) Pricing and (e.) Experience of Developer
- Considered out of State Resources but financial settlement differences, delivery costs and regulatory & legislative compliance misalignment too big a risk (in State law)
- Over 90% of Agency membership participating (remaining 10% large % of renewable)

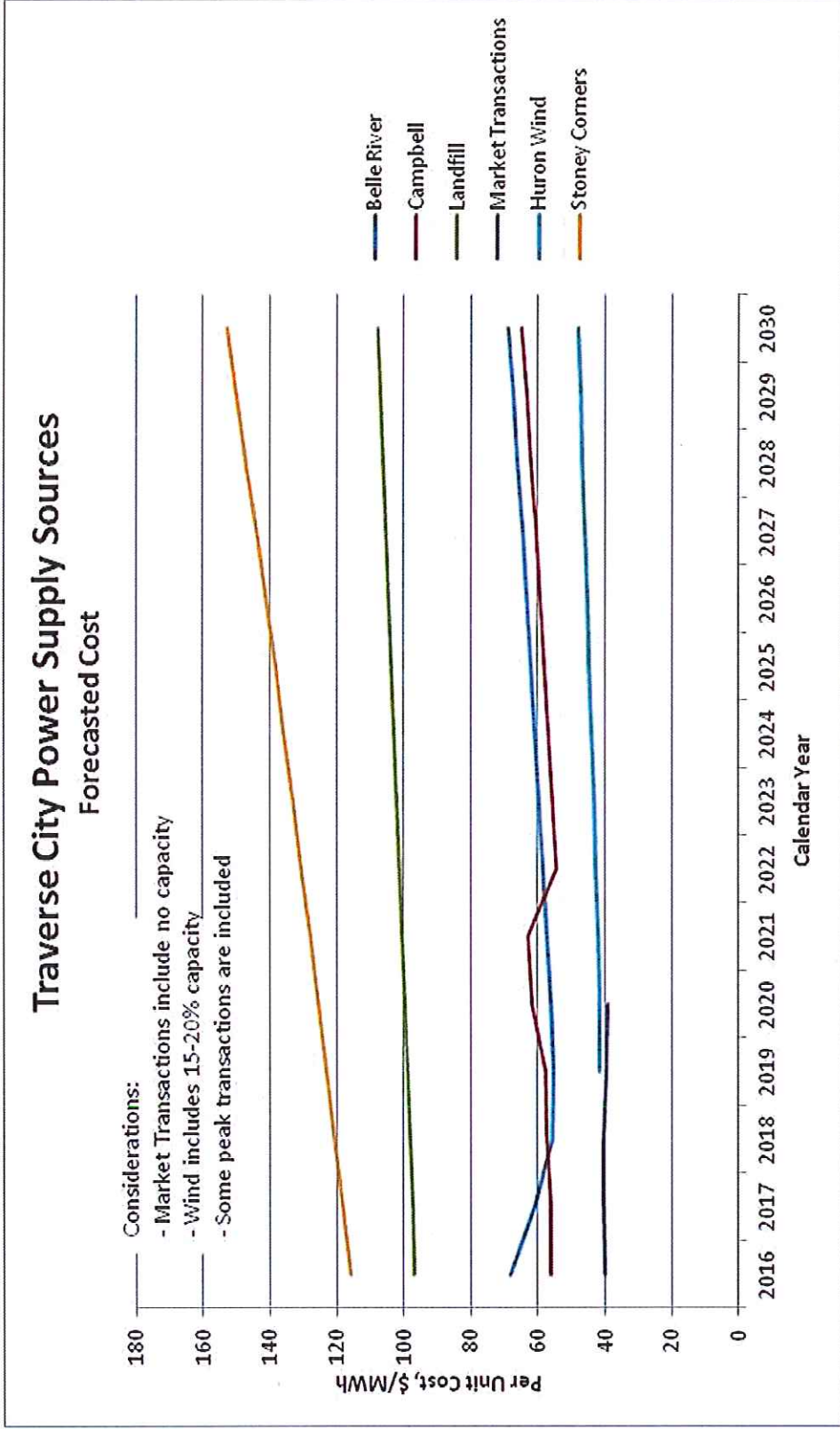


Why Huron Wind Project?

- Project developed by the largest wind power developer in the United States
- Interconnected to the most robust delivery system in Michigan – 345 kV Thumb Loop
- One of the best wind resource locations in all of Michigan (high annual efficiency)
- Latest technology - Turbines (GE)
- Advanced quality project development with supportive land owners
- Customized Agreement with advantageous terms and conditions
- Economic competitive advantage – pricing and product delivery structure
- Credibility of operator - one of the largest power generators in North America

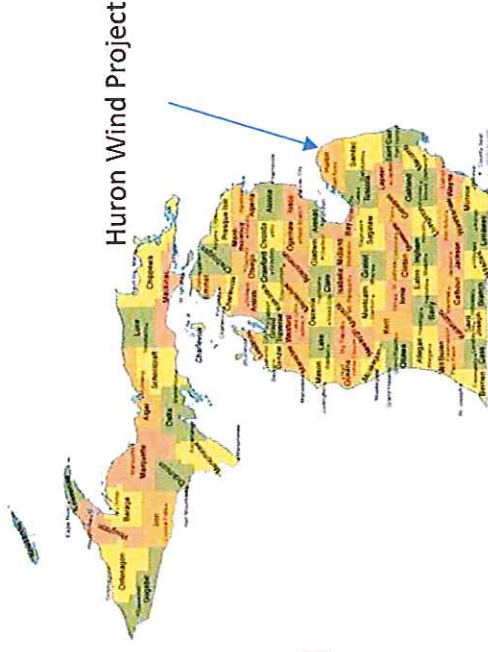


How does Huron Wind PPA Compare?



Wind Supply - Key Specifications

- Huron County, MI (thumb region)
- 20 Year Power Purchase Agreement
- Receive Energy, Capacity and Environmental Attributes
- Pricing – competitive w/ conventional power supply
- Commercial Operation expected mid 2018
- Pay only for what is produced & delivered (Operational Risk remains with operator)
- Transaction quantity tailored to each members power supply portfolio needs





TRAVERSE CITY
LIGHT & POWER

To: TCL&P Board
From: Tim Werner, Board Member
Date: April 20, 2016
Subject: Large Scale Solar

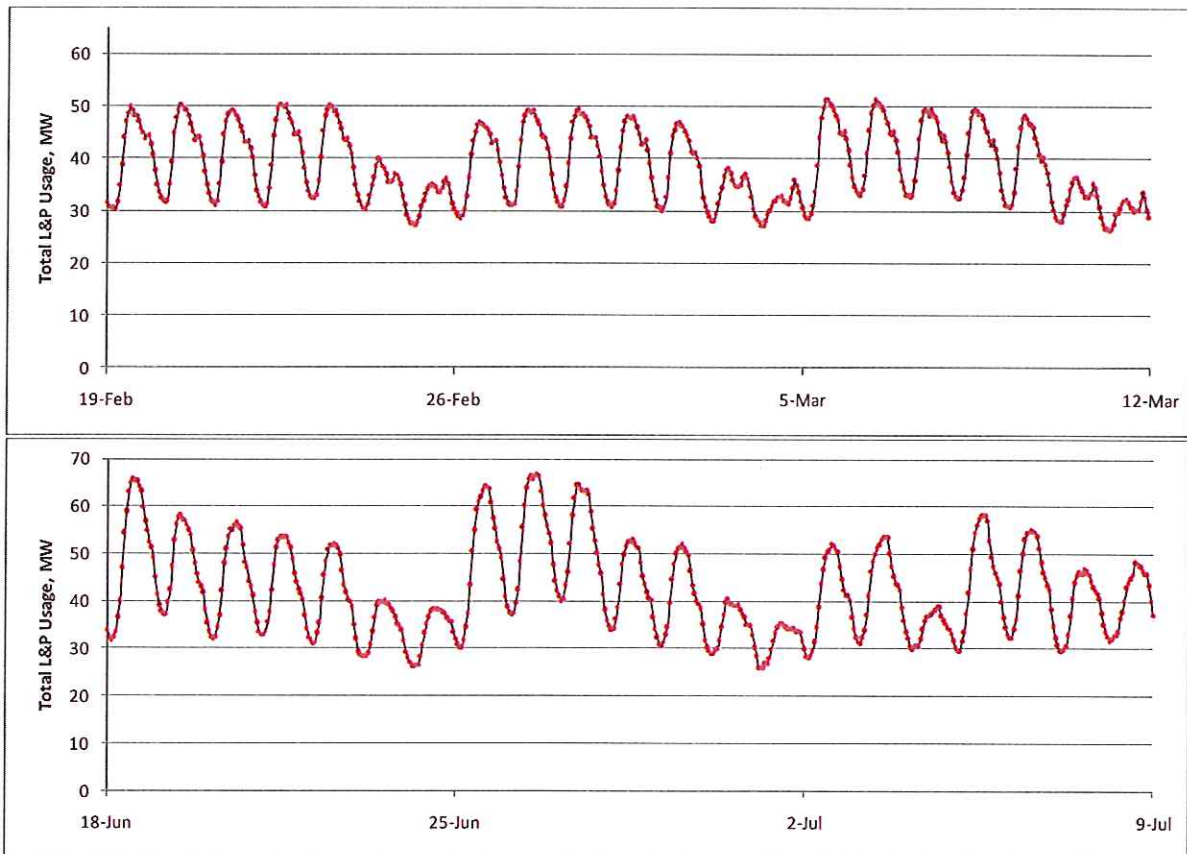
I am writing to request that the TCL&P Board direct Executive Director Arends to study the economics of a TCL&P owned 1 megawatt PV solar peaker plant. This effort will require TCL&P staff time, as well as outside expertise, in order to provide the board with accurate costs rather than rough estimates. As costs to produce electricity from solar have continued to decline, I believe it is a responsible course of action for TCL&P to determine if solar is a viable local peaker plant option.

It is likely that there will be a gap between the cost of the peaker plant and what the TCL&P Board is willing to spend. This gap should be described both in terms of total peaker plant cost, and in terms of cost per kilowatt-hour. Understanding this gap, and how it might shrink over time, will provide an opportunity for discussion of various means of closing and/or filling the gap.

One tool that can play a significant role in closing the gap is the 30% federal investment tax credit, ITC. Realizing the ITC will not be a simple endeavor for TCL&P, but the potential value of the ITC merits the effort. TCL&P might be able to work with a company in the business of matching non-profit entities with companies having the appropriate tax appetite. Another approach might be to work directly with local companies having the appropriate tax appetite.

Many Traverse City citizens, businesses, and local organizations have expressed interest and support for renewable energy and solar energy specifically. Creative minds can probably come up with various ways that this interest and support can be leveraged to fill the gap between the cost of solar and what TCL&P will pay for solar. The City Commission has also expressed interest and support for renewable energy, so there might be opportunities to engage the City in the project.

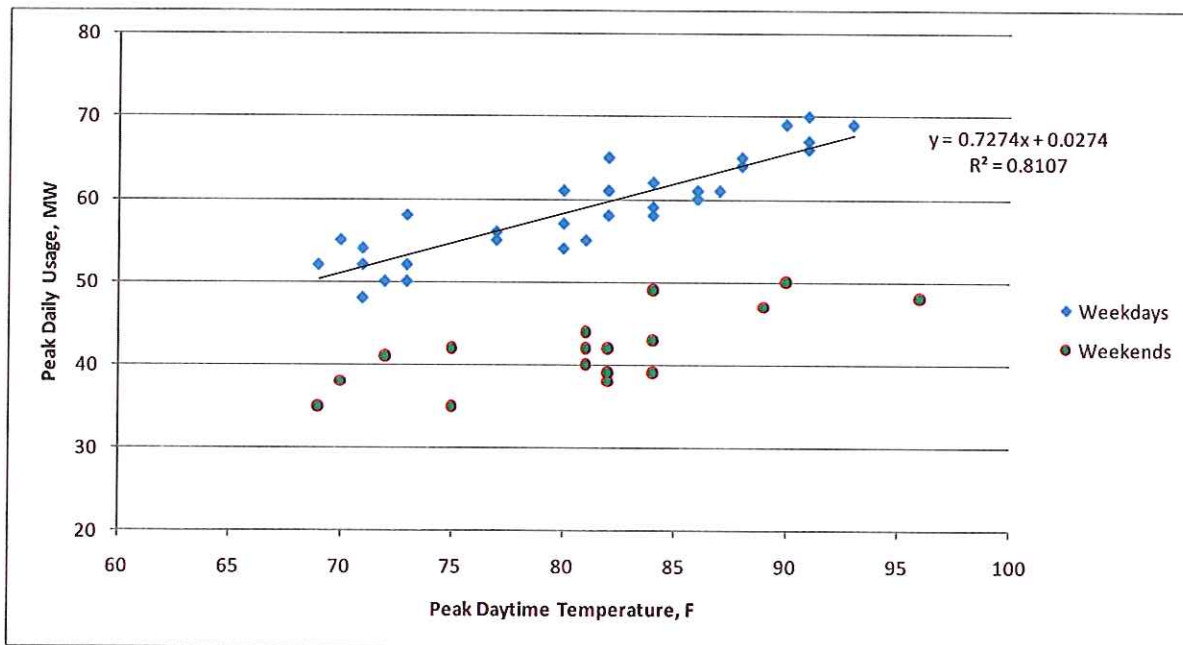
Total TCL&P Demand: A TCL&P 1 megawatt PV solar generation plant could operate as a peaking plant, as daily peak electricity demand occurs close to solar noon. In the two figures shown, hourly total TCL&P demand is graphed for two different three week periods in 2007. The data shown is representative of non-summer demand (top) and summer demand (bottom). The amplitude of the daily peak demand is consistent for both non-summer weekdays, and summer weekdays.



The non-summer demand is very regular with an almost fixed nightly minimum, and it is easy to pick out the days of the week; five weekdays with higher peak demand, and two weekend days with lower peak demand. The weekday peaks are between 45 and 50 MW, while the troughs are near 30 MW. The difference in daily peaks from weekdays to weekends is consistently in the 10 to 15 MW range, and is the result of increased weekday demand by commercial and industrial rate payers during standard business hours.

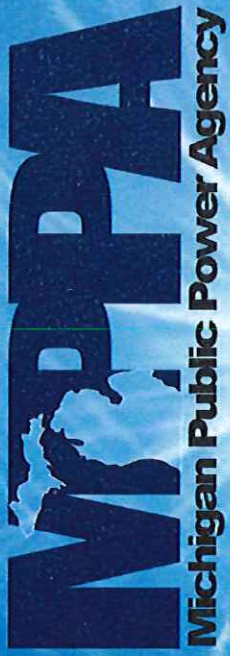
The summer demand is not as regular as the non-summer demand, but the days of the week are still apparent. The Independence Day holiday stands out for its peak demand being similar to a weekend day. The daily peak demand passes 65 MW on some weekdays, while the troughs range from approximately 30 MW to near 40 MW. As with the non-summer demand, the daily variation in demand approaches 20 MW. Air conditioning in the summer is the primary driver for the increased electricity demand, and the increased variability in peak electricity demand.

Peak Demand Variability: The figure below shows the peak daily demand as a function of peak daytime temperature with weekdays as one subset, and weekends and holidays as a second subset. The data are from June 14 through August 5 of 2007. Linear regression (equation shown on the figure) shows that peak weekday demand is a strong function of peak daytime temperature. The hottest weekdays of the year in 2007 had peak demands near 70 MW, while the hottest weekend days of the year in 2007 had peak demands near 50 MW.



Notice that when the weekday peak temperatures are at 68 F, the peak daily demand is approximately 50 MW, which coincides with peak winter demand illustrated in the first figure. Commercial and industrial rate payers that primarily operate during standard business hours account for approximately 20 MW of air conditioning load as the temperature peak moves from 68 F up toward 95 F.

This is only a cursory look at data from one year, but the nature of the daily and seasonal variation in total TCL&P demand could allow for up to 5 MW of peak shaving from PV solar. A peaking plant producing electricity from PV solar will make economic sense for Traverse City. I believe that it is a responsible course of action to understand when and how it will make economic sense.



Michigan Public Power Agency

Solar Program

Why Solar

- Wind will no longer be a “good” option for MPPA Members
 - Best wind locations are depleted
 - New State legislation increasing the 10% requirement will likely push wind projects to 2nd and 3rd Tier locations
- Time is on our side
 - Investment Tax Credit has been extended through 2020 and phases out over the following two years.
 - Cost of solar has declined rapidly and is expected to continue to decline
 - We can get more clarity on State requirements/goals
 - We can get more clarity on the federal Clean Power Program
- Utility-scale solar can be installed in much smaller increments than wind projects
- Solar generation profile fits what the grid operator needs – generation during hours of greatest demand

PPA Pricing of Solar Projects

- > 10 MW – less than \$60 per MWh
- > 1 MW and < 10 MW - \$70 to \$85 per MWh
- < 1 MW – over \$85 per MWh

Also receive other benefits,

- Renewable energy credits toward State compliance
- ~65% capacity credit toward resource adequacy requirement

Where to locate Solar



- Member-connected rather than grid-connected
- Requires a lot of relatively flat land
- Distribution considerations

Benefit to MPPA Members

- Allow MPPA Members to “fine-tune” their desired renewable supply
- Lower cost than any member can reasonably do a project themselves
- Reasonable cost compared to the cost of other supply sources in the portfolio
- Added diversification to power supply mix



TRAVERSE CITY
LIGHT & POWER

To: Light and Power Board
From: Karla Myers-Beman, Controller *KMB*
Date: May 25, 2016
Subject: Quarterly Financial Report

Enclosed in your packet are the third quarter financial statements for the Electric and Fiber Funds.

Electric Utility Fund

As of March 31, 2016 (75% through the fiscal year) operating revenues are 72.39% of budgeted operating revenues. Overall revenues have decreased compared to prior year because of the modifications made to the PCR formula and decrease in the wholesale cost of power.

Total operating expenses are at 71.49% of budget year-to-date, or very nearly on-budget, with purchase power costs at 71.27%, Transmission is at 84.42% higher than expected due to Attachment O salary/wage allocations, which is based on the value of transmission assets compared to the utility's total assets (used for MISO reimbursement calculations) are higher than what used in the budget, Customer Accounting is at 69.30% lower than expected due to positions being filled with new personnel starting at the beginning of the salaries/wages scale, General administration expenses at 67.85% lower than expected because of expenses expected to be incurred later in the fiscal year.

Net income through the first quarter is \$2,007,934, which is approximately a \$2,268,000 decrease over the prior year.

Cash flows shows approximately \$6.6 million expended in capital assets, primarily for West Side Transmission Line project, Pine and State Street Underground project, South Substation replacement transformers, and the Covered Storage Building project.

Fiber Fund

Revenues in the Fiber Fund are 62.18% of budgeted operating revenues while expenses are 79.03% of budget year-to-date. Salaries and related fringe benefits are at 118.31% and 129.87% of budget, because more time is being allocated to fiber maintenance during the fiscal year than expected. The Fund has a net loss or change in net position of \$(17,295).

TRAVERSE CITY LIGHT AND POWER

(A Component Unit of the City of Traverse City, Michigan)

ELECTRIC FUND STATEMENT OF NET POSITION MARCH 31, 2016

ASSETS

Current assets					
Cash and cash equivalents	\$	3,353,077		Accounts payable	\$ 1,145,649
Investments		15,986,786		Accrued expenses and other liabilities	278,002
Receivables				Customer deposits	110,752
Customer, less allowances of \$279,103 for uncollectible accounts (Light and Power Fund)		2,742,610		Unearned revenue	-
Accrued interest		50,681		Compensated absences	3,150
Taxes		3,266		Due to primary government	199,743
Other		1,575,108			
Inventories		1,635,299		Total current liabilities	1,737,296
Prepaid expenses		39,586			
Total current assets		25,386,413		Long-term liabilities	
				Compensated absences	152,522
Non-current assets				Net pension liability	10,431,954
Other postemployment benefit asset		1,149,539		Total long term liabilities	10,584,476
Long-term advances - due from primary government		2,866			
Asset held for sale		-		Total liabilities	12,321,772
Land and land improvements		1,395,691			
Construction in progress		11,532,914			
Capital assets being depreciated, net		42,599,345			
Total non-current assets		56,680,355		Net position	
Total assets		82,066,768		Invested in capital assets	55,527,950
				Unrestricted	14,856,360
Deferred outflow		639,314		Total net position	\$ 70,384,310
Total cash and investments	\$	19,339,863			

TRAVERSE CITY LIGHT AND POWER

(A Component Unit of the City of Traverse City, Michigan)

ELECTRIC FUND

SCHEDULE OF REVENUES AND EXPENSES - BUDGET AND ACTUAL (UNAUDITED)
FOR THE PERIOD ENDED MARCH 31, 2016

	Month to Month Comparison			Year to Year Comparison			Budget to Year to date Comparison			
	Month to date Actual	Month to date Prior Year	Month to date Difference	Year to date Actual	Year to date Prior Year	Year to date Difference	Amended Budget	Year to date Actual	Favorable (Unfavorable)	% of budget
Operating revenues - sales										
Residential	\$ 484,862	\$ 430,999	\$ 53,863	\$ 4,638,056	\$ 5,271,472	\$ (633,416)	\$ 6,338,000	\$ 4,638,056	\$ (1,699,944)	73.18%
Commercial	1,203,435	1,170,254	33,181	11,327,473	12,657,447	(1,329,973)	15,766,500	11,327,473	(4,439,027)	71.85%
Industrial	724,908	697,953	26,955	7,260,899	8,248,499	(987,600)	10,040,000	7,260,899	(2,779,101)	72.32%
Public authority	15,942	20,253	(4,310)	228,784	247,525	(18,741)	286,000	228,784	(57,216)	79.99%
Street lighting	16,695	16,692	3	148,847	148,029	818	195,000	148,847	(46,153)	76.33%
Yard lights	8,088	7,898	191	71,984	62,074	9,910	82,000	71,984	(10,016)	87.79%
Total operating revenues - sales	2,453,930	2,344,048	109,882	23,676,043	26,635,045	(2,959,002)	32,707,500	23,676,043	(9,031,457)	72.39%
Other operating revenues										
Forfeited discounts	5,476	7,093	(1,617)	47,891	58,925	(11,034)	60,000	47,891	(12,109)	79.82%
Merchandise and jobbing	82,181	9,775	72,407	132,137	91,902	40,235	187,000	132,137	(54,863)	70.66%
Sale of scrap	8,939	-	8,939	39,228	25,874	13,354	35,000	39,228	4,228	112.08%
Recovery of bad debts	-	-	-	26	30	(4)	200	26	(174)	13.25%
MISO income	250,874	180,065	70,809	2,677,040	1,908,815	768,224	2,900,000	2,677,040	(222,960)	92.31%
Miscellaneous	2,070	2,131	(61)	31,489	31,903	(414)	39,000	31,489	(7,511)	80.74%
Total other operating revenues	349,540	199,063	150,477	2,927,811	2,117,450	810,361	3,221,200	2,927,811	(293,389)	90.89%
Nonoperating revenues										
Rental income	1,475	1,475	-	39,962	44,907	(4,945)	44,350	39,962	(4,388)	90.11%
Pole rental income	-	-	-	32,754	41,224	(8,470)	34,600	32,754	(1,846)	94.66%
Reimbursements	(422)	13,955	(14,377)	333,704	43,619	290,085	102,800	333,704	230,904	324.61%
Interest income	21,306	32,914	(11,608)	183,023	223,947	(40,924)	250,000	183,023	(66,977)	73.21%
Gain/loss on sale of assets	342	-	342	906	(347,814)	348,720	25,000	906	(24,094)	3.62%
Total nonoperating revenues	22,701	48,344	(25,643)	590,348	5,883	584,465	456,750	590,348	133,598	129.25%
Total revenues	2,826,171	2,591,456	234,716	27,194,203	28,758,379	(1,564,176)	36,385,450	27,194,203	(9,191,247)	74.74%
Generation expense										
Non purchase power expenses	9,359	16,868	(7,509)	154,452	263,288	(108,836)	317,100	154,452	162,648	48.71%
Capacity costs	52,000	-	52,000	332,000	-	332,000	672,000	332,000	340,000	49.40%
MISO	438,414	(69,125)	507,538	1,072,858	(167,876)	1,240,733	257,800	1,072,858	(815,058)	416.16%
Lansing Bridge	-	486,764	(486,764)	2,898,085	4,190,461	(1,292,377)	3,091,000	2,898,085	192,915	93.76%
Stoney Corners	232,727	297,830	(65,103)	2,343,125	2,131,762	211,363	3,257,000	2,343,125	913,875	71.94%
M-72 Wind Turbine	2,912	441	2,471	28,688	3,668	25,020	42,000	28,688	13,312	68.31%
Combustion Turbine	285,722	213,002	72,720	2,546,557	2,488,353	58,204	4,714,000	2,546,557	2,167,443	54.02%
Campbell Coal Plant	317,245	455,213	(117,968)	3,618,885	3,754,347	(135,463)	4,580,000	3,618,885	961,115	79.01%
Belle River Coal Plant	288,054	513,177	(225,123)	3,497,575	4,154,205	(656,630)	4,364,000	3,497,575	866,425	80.15%
Landfill Gas	49,602	37,374	12,228	421,179	359,741	61,438	1,127,000	421,179	705,821	37.37%
Bilateral contracts	258,364	29,516	208,849	674,854	268,307	406,547	2,357,000	674,854	1,682,146	28.63%
Purchase power expenses	1,905,040	1,944,192	(39,152)	17,433,805	17,182,968	250,837	24,461,800	17,433,805	7,027,995	71.27%
Total generation expenses	1,914,399	1,961,060	(46,662)	17,588,257	17,446,256	142,001	24,778,900	17,588,257	7,190,643	70.98%
Distribution expense										

TRAVERSE CITY LIGHT AND POWER

(A Component Unit of the City of Traverse City, Michigan)

ELECTRIC FUND
 SCHEDULE OF REVENUES AND EXPENSES - BUDGET AND ACTUAL (UNAUDITED)
 FOR THE PERIOD ENDED MARCH 31, 2016

	Month to Month Comparison			Year to Year Comparison			Budget to Year to date Comparison			% of budget
	Month to date Actual	Prior Year	Month to date Difference	Year to date Actual	Prior Year	Year to date Difference	Amended Budget	Year to date Actual	Favorable (Unfavorable)	
Distribution	\$ 272,852	\$ 237,223	\$ 35,629	\$ 2,852,492	\$ 2,444,367	\$ 408,125	\$ 3,976,150	\$ 2,852,492	\$ 1,123,658	71.74%
Transmission	34,525	21,715	12,811	303,308	249,932	53,375	359,300	303,308	55,992	84.42%
Customer accounting	37,516	40,221	(2,706)	361,397	374,575	(13,178)	521,500	361,397	160,103	69.30%
Public service	49,824	45,360	4,464	479,045	402,480	76,565	679,400	479,045	200,355	70.51%
General administration expense	66,889	63,412	3,478	611,867	610,539	1,328	901,800	611,867	289,933	67.85%
Other expenses										
Insurance	5,099	4,675	424	46,705	43,850	2,855	63,000	46,705	16,295	74.13%
City fee	125,000	125,000	-	1,324,743	1,390,177	(65,434)	1,801,000	1,324,743	476,257	73.56%
Depreciation	179,828	168,932	10,896	1,618,455	1,520,388	98,067	2,150,000	1,618,455	531,545	75.28%
Total expenses	2,685,932	2,667,598	18,334	25,186,269	24,482,566	703,703	35,231,050	25,186,269	10,044,781	71.49%
Change in net position	\$ 140,240	\$ (76,142)	\$ 216,382	\$ 2,007,934	\$ 4,275,813	\$ (2,267,880)	\$ 1,154,400	\$ 2,007,934	\$ 853,534	

TRAVERSE CITY LIGHT AND POWER

(A Component Unit of the City of Traverse City, Michigan)

ELECTRIC FUND
SUPPLEMENTARY INFORMATION
FOR THE PERIOD ENDED MARCH 31, 2016

SALES	KWH month	KWH year to date	Monthly revenue	Year to date revenue	Current month	Prior year month	Revenue/Sales monthly variance	Year to date	Prior year to date	Revenue/Sales year to date variance
Residential Sales	4,791,798	42,598,386	\$ 526,203	\$ 4,675,569	\$ 0.1098	\$ 0.1093	\$ 0.0005	\$ 0.1098	\$ 0.1200	\$ (0.0102)
Commercial Sales	12,418,741	108,760,631	1,355,616	11,740,460	0.1092	0.1084	0.0008	0.1079	0.1201	(0.0122)
Industrial Sales	8,970,570	91,557,480	724,908	7,327,841	0.0808	0.0760	0.0048	0.0800	0.0954	(0.0154)
Yard and Street Lights	206,900	1,126,724	41,107	222,649	0.1987	0.1967	0.0020	0.1976	0.1893	0.0083
Total Sales	26,388,009	244,043,221	\$ 2,647,834	\$ 23,966,519						

Note: Revenues do not agree to income statement because of monthly accruals.

PURCHASED POWER	KWH month	KWH year to date	Monthly cost	Year to date cost	Cost per KWH for the month	Cost per KWH for the year to date
Lansing Bridge	-	58,944,000	\$ -	\$ 2,898,084.57	#DIV/0!	\$ 0.049
MISO Account	-	(3,416,700)	36.54	114,072.70	#DIV/0!	(0.033)
MISO - BWL	5,884,431	8,769,803	500,045.31	1,118,503.50	0.085	0.128
MISO - MPPA	not applicable	not applicable	1,699.81	16,123.16	not applicable	not applicable
Wolverine	not applicable	not applicable	(63,367.84)	(175,841.76)	not applicable	not applicable
Transmission	5,884,431	5,353,103	438,413.82	1,072,857.60	0.075	0.200
Subtotal	12,592,000	40,416,000	238,364.48	674,853.72	0.019	0.017
Bilateral Contract	6,863,920	61,369,891	317,245.00	3,618,885.00	0.046	0.059
Campbell #3	4,155,612	50,062,492	288,054.00	3,497,575.00	0.069	0.070
Belle River	2,268,006	24,862,701	285,721.53	2,546,556.77	0.126	0.102
Combustion Turbine	781,986	6,779,963	49,601.70	421,179.13	0.063	0.062
Landfill Gas	2,007,653	20,480,604	232,727.14	2,343,124.60	0.116	0.114
Stoney Corners	41,598	409,835	2,911.86	28,688.45	0.070	0.070
M-72 Wind Turbine	not applicable	not applicable	52,000.00	332,000.00	not applicable	not applicable
MPPA Capacity Costs (market)	34,595,206	268,678,589	\$ 1,905,039.53	\$ 17,433,804.84	\$ 0.055	\$ 0.065
Total						

TRAVERSE CITY LIGHT AND POWER

(A Component Unit of the City of Traverse City, Michigan)

ELECTRIC FUND STATEMENT OF CASH FLOWS FOR THE PERIOD ENDED MARCH 31, 2016

Cash flows from operating activities	
Cash received from customers	\$ 26,367,801
Cash payments to employees	(3,254,894)
Cash payments to suppliers for goods and services	(19,629,546)
Cash payments of City fee	(1,488,259)
	<hr/>
Net cash provided by operating activities	1,995,103
	<hr/>
Cash flows from noncapital financing activities	
Cash payments from funds	19,441
Customer deposits paid	12,366
Rental income received	72,715
Reimbursements received	333,704
	<hr/>
Net cash provided by noncapital financing activities	438,226
	<hr/>
Cash flows from capital and related financing activities	
Proceeds from assets held for sale	980,900
Purchase of capital assets	(6,575,794)
	<hr/>
Net cash used by capital and related financing activities	(5,594,894)
	<hr/>
Cash flows from investing activities	
Sale of investments	(2,766,384)
Interest and dividends	183,023
	<hr/>
Net cash used by investing activities	(2,583,361)
	<hr/>
Net decrease in cash and cash equivalents	(5,744,926)
	<hr/>
Cash and cash equivalents, beginning of year	9,098,003
	<hr/>
Cash and cash equivalents, end of year	\$ 3,353,077

TRAVERSE CITY LIGHT AND POWER

(A Component Unit of the City of Traverse City, Michigan)

FIBER FUND STATEMENT OF NET POSITION MARCH 31, 2016

ASSETS	LIABILITIES AND NET POSITION	
Current assets		
Cash and cash equivalents	\$ 295,518	\$ 214
Accounts receivable	6,371	522
Inventory	5,956	14,270
Prepaid expenses	<u>35</u>	<u>-</u>
Total current assets	307,880	15,006
Non-current assets		
Construction in progress	5,125	1,008
Capital assets being depreciated, net	<u>1,574,657</u>	<u>26,765</u>
Total non-current assets	1,579,782	42,779
Total assets	1,887,662	1,579,782
Deferred outflow	<u>1,586</u>	<u>266,687</u>
		\$ 1,846,469

TRAVERSE CITY LIGHT AND POWER

(A Component Unit of the City of Traverse City, Michigan)

FIBER FUND

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION FOR THE PERIOD ENDED MARCH 31, 2016

	Amended Budget	Year to date Actual	Favorable (Unfavorable)	Percentage of Budget
Operating revenues				
Charges for services	\$ 288,200	\$ 179,082	\$ (109,118)	62.14%
Merchandising and jobbing	-	129	129	#DIV/0!
Total operating revenues	288,200	179,211	(108,989)	62.18%
Operating expenses				
Salaries and wages	31,000	36,675	(5,675)	118.31%
Fringe benefits	21,000	27,272	(6,272)	129.87%
Supplies	12,000	29	11,971	0.24%
WiFi Operations and maintenance	37,400	26,278	11,122	70.26%
Professional and contractual	6,400	7,398	(998)	115.59%
Professional development	2,100	-	2,100	0.00%
Insurance	1,200	-	1,200	0.00%
Vehicle Rental	4,500	8,216	(3,716)	182.57%
City fee	14,435	-	14,435	0.00%
Depreciation	138,400	106,269	32,131	76.78%
Total operating expenses	268,435	212,137	56,298	79.03%
Operating income (loss)	19,765	(32,925)	(52,820)	
Nonoperating revenues				
Reimbursements	30,400	15,630	(14,770)	51.42%
Change in net position	50,165	(17,295)	(67,460)	-34.48%
Net position, beginning of year	1,863,764	1,863,764	-	
Net position, end of year	\$ 1,913,929	\$ 1,846,469	\$ (67,460)	