

A REGULAR MEETING

Of The

TRAVERSE CITY LIGHT AND POWER BOARD

Will Be Held On

TUESDAY, September 13, 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: 09-09-16
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.

3. Unfinished Business

- a. Consideration of Coal Dock Proceeds Resolution. (Arends/Geht) (p.3)
- b. Consideration of approving a construction contract with CC Power, LLC in the amount of \$325,045.00 for the Orchard Heights Overhead-to-Underground Conversion Phase 1 Project. (Approval recommended) (Schimpke) (p.10)

4. New Business

- a. Consideration of approving minutes of the Regular Meeting of August 23, 2016. (Approval recommended) (p.13)
- b. City Funding Policy. (Arends) (p.16)

5. Appointments

None.

6. Reports and Communications

- a. From Legal Counsel.
 1. Consideration of trial & settlement strategy regarding the Estate of Zachary Adams vs. TCL&P and Trees, Inc. (Possible closed session) (Doren)
- b. From Staff.
 1. Solar rate analysis. (Myers-Beman) (p.52)
 2. Municipal Ordinance Proposal. (Myers-Beman) (verbal) (handouts at the meeting)

- c. From Board.

7. Public Comment

/js



TRAVERSE CITY
LIGHT & POWER

To: Light & Power Board
From: Tim Arends, Executive Director
Date: September 7, 2016
Subject: Resolution

At the request of the Board Chairman the attached resolution is on the agenda for your consideration. Other communications are attached directly referenced within the resolution for your review.

TRAVERSE CITY LIGHT AND POWER DEPARTMENT
COAL DOCK PROCEEDS RESOLUTION

WHEREAS, the Traverse City Light and Power Department, a component unit of the City of Traverse City, (TCL&P) owned property, located in the Township of Elmwood, Leelanau County, Michigan that is commonly known as the "coal dock" property, tax parcel identification numbers of 004-033-078-00, 004-033-079-00, and 004-033-074-00; and

WHEREAS, the TCL&P Board at its April 8, 2014 board meeting adopted a resolution declaring the coal dock property surplus and conveyed it to the City with the anticipation the City was going to deed the property to the Discovery Center for \$1. Subsequent to this action Rotary Camps and Services provided an offer of \$1,000,000 for the property; and

WHEREAS, the TCL&P Board Chairman at the October 27, 2015 TCL&P board meeting inquired and confirmed of the City Manager that he would propose to the City Commission \$250,000 of the coal dock proceeds would be transferred to TCL&P to cover the original purchase price of the coal dock and make the utility ratepayers whole; and

WHEREAS, the City Commission at its November 2, 2015 commission meeting certified the TCL&P coal dock property as not necessary for the operation of the Light and Power Department, as required by the City Charter; and that the City Commission accepts the conveyance of the Coal Dock properties from TCL&P as described in the Quit Claim Deed and execute all necessary documents to convey to Rotary Camps and Services for consideration in the amount of one million dollars (\$1,000,000) and that the proceeds be distributed as directed by official action of the City Commission at a future date; and

WHEREAS, the TCL&P Executive Director sent a memorandum on February 21, 2016 to Marty Colburn, City Manager formally requesting to recommend to the City Commission TCL&P be reimbursed for its current book value for the original purchase price in the amount of \$245,633.64 (attached); and

WHEREAS, on May 2, 2016 the property was formally conveyed from the City of Traverse City to Rotary Camps and Services through the coal dock property closing held at the offices of Rotary Camps and Services; and

WHEREAS, the TCL&P Board Chairman sent a letter on August 23, 2016 to Mayor Carruthers formally requesting an inter-fund transfer in the amount of \$245,633.64 for reimbursement of the current book value for the original purchase price from the proceeds received from the sale of the property to Rotary Camps and Services (attached); and

WHEREAS, on August 31, 2016, Mayor Carruthers sent a letter to the TCL&P Board Chairman stating discussion will be necessary with other City Commissioners before the formal request of the coal dock proceeds in the amount of \$245,633.64 be reimbursed to TCL&P become an agenda item on the City Commission (attached); and

WHEREAS, failure of the Utility to receive proceeds from the sale of the coal dock property will cause the utility to record a loss on the original cost of the coal dock; and

NOW, THEREFORE BE IT RESOLVED that the TCL&P Board approves this resolution respectfully requesting the City Commission to make the utility rate payers whole for the initial investment of the coal dock property by transferring \$245,633.64 to TCL&P.

I hereby certify that the above Resolution was adopted on _____, 2016, at the regular TCL&P Board meeting held in the Commission Chambers, Governmental Center, 400 Boardman Avenue, Traverse City, Michigan.

Timothy J. Arends
Secretary
Traverse City Light & Power Board



TRAVERSE CITY
LIGHT & POWER

To: Marty Colburn, City Manager
From: Tim Arends, TCL&P Executive Director
Date: February 2, 2016
Subject: Coal Dock Proceeds Distribution

In the coming months the City Commission will be contemplating how to allocate the proceeds of the coal dock properties sold to Rotary Charities. Please accept this memo as a formal request of Traverse City Light & Power (TCL&P) that it is reimbursed for its actual cost and improvements to the coal dock (book value) from those proceeds.

The utility Board transferred the title of the property to the City after it declared the coal dock properties to no longer have a utility purpose. The City Commission, as required by City Charter, must agree to surplus status of TCL&P property before it can dispose of real property. Further, the Board felt that the elected city officials were the appropriate body to determine the fate of this valuable asset. The City Commission received the property, declared it surplus, and subsequently entered into a purchase agreement with Rotary Charities to sell the property to them for one million dollars, subject to environmental studies.

The current book value in the utility's financial statements is \$245,633.64. By allocating this amount to the utility from the proceeds it will prevent the utility from having to record a loss on the disposal of the asset in its financial statements. As well, it returns the funds paid for by the utility's ratepayers for their investment in these properties.

My hope is that you will recommend and the City Commission will agree to fully reimburse the electric utility fund for the book value. I believe it to be an appropriate allocation that will still provide substantial funds to the City for other worthy projects that benefit the public.

Please let me know when this discussion will take place and if you would like my involvement in those discussions.

Cc: TCL&P Board Members



**TRAVERSE CITY
LIGHT & POWER**

Investing Our Energy In You

August 23, 2016

Mayor Carruthers
400 Boardman Avenue
Traverse City, MI 49684

Re: Coal Dock Proceeds

Dear Mayor Carruthers,

It has come to my attention that the City Manager has apparently failed to bring to the City Commission's attention prior requests from the Executive Director of Traverse City Light & Power (TCL&P) that the utility be reimbursed for its actual cost and improvements to the coal dock (book value) from the proceeds the City received from the sale of the property to Rotary Charities on May 2, 2016. The requested amount of proceeds is \$245,633.64. It is my understanding that the transfer can be accomplished through the inter-fund transfer.

I respectfully request that the City honor its prior verbal promise to TCL&P at its next regularly scheduled meeting. Please note that TCL&P is scheduled to re-examine a number of its financial commitments to the City at its meeting on September 13, 2016. I expect that your response and actions will help inform the Board on its ultimate decisions made by the Board at that meeting.

While I believe you are aware of the issues as they occurred during your tenure on the TCL&P Board, I briefly outline them below:

The Board passed a resolution offering to transfer the coal dock to the City Commission with the understanding the City was going to transfer the property to the Discovery Center for \$1. Subsequent to this offer but prior to its acceptance by the City Commission, the City Commission entered into a purchase agreement with Rotary Charities for one million (\$1,000,000) dollars for the sale of the Coal Dock. The Board was assured by the City Manager that TCL&P would receive the book value from the proceeds. Relying on that representation, the Board did not revoke its offer to transfer the Coal Dock to the City Commission, which it was free to do at its October 27, 2015 meeting.

Please note that, aside from our expectation that the City will fulfill its promise to the Board, our ratepayer's deserve to have the value of their initial investment returned to them.

I would like to thank you for your anticipated cooperation in repaying TCL&P ratepayers for their initial investment in the coal dock properties and look forward to hearing from you soon.

Sincerely,

Jan Geht
Board Chairman

Cc: Tim Arends, TCL&P Executive Director
Marty Colburn, City Manager

The City of Traverse City

GOVERNMENTAL CENTER
400 Boardman Avenue
Traverse City, MI 49684
(231) 922-4440
(231) 922-4476 Fax



August 31, 2016

Jan Geht, Board Chairman
Traverse City Light & Power
1131 Hastings St
Traverse City MI 49686

Re: Coal Dock Proceeds

Dear Mr. Geht,

On Monday, August 28, 2016 I received your letter dated August 23, 2016 regarding the proceeds from the sale of the coal dock.

First, in response to your statement in the letter that City Manager Colburn made promises to the TCLP Board, I offer the following:

During the Joint Meeting between the City Commission and the Light & Power Board held in September of 2015, you stated that TCL&P had declared the property surplus to Light and Power, and that it would be the City's decision about whether to declare the property surplus to the City and whether to accept the proposal from Rotary Charities or not. You also stated that if the property were to be accepted by the City, both the environmental concerns and the million dollar windfall, if the property were to be sold, would be the City's.

While Mr. Colburn did make a recommendation early in the discussion stages that \$250K should be allocated to TCL&P, the City Manager's recommendation was never acted upon by the City Commission. In fact, the motion to sell the surplus property specifically included language to the effect that disposition of the proceeds of the sale would be determined by the City Commission at a later date.

Second, please clarify how your statement regarding a re-examination of TCL&P's financial commitments to the City at your board meeting of September 13, 2016 has a correlation to the disposition of the proceeds of the sale of the Coal Dock.

Third, with regard to your request to place TCL&P's request for the City to distribute \$245,633.64 of the proceeds from the sale of the Coal Dock on the agenda for the next regularly scheduled meeting; I, as Mayor, need to discuss with other City Commissioners whether we need to place the item on a subsequent agenda.

Sincerely,



Jim Carruthers
Mayor
City of Traverse City

Enc. Copy of Letter from Jan Geht dated August 23, 2016
Copy: Traverse City Board of Commissioners
TCL&P Board of Directors
Martin Colburn, City Manager
Tim Arends, TCL&P Executive Director



**TRAVERSE CITY
LIGHT & POWER**

To: Light & Power Board
From: Pete Schimpke, Manager of Operations and Engineering *PJS*
Date: September 7, 2016
Subject: Construction Contract - Orchard Heights Overhead to Underground Conversion: Phase I Project

At the June 28, 2016 regular meeting the Board approved the Project Authorization Request for the Orchard Heights Overhead to Underground Conversion: Phase I Project. Construction contract bids were sought to convert the overhead line to underground and cutover any existing overhead services to underground.

AT&T and Charter Communications both have facilities on this pole line. Charter has stated they will coordinate the removal of their facilities at their own expense. AT&T requested the TCL&P bid document include costs to bury the phone line in this area for their review and consideration. If AT&T chooses to have TCL&P's contractor bury their facilities, AT&T will reimburse the utility for this cost.

Requests were sent out and bids were received as follows:

Bidder	Underground Installation and Overhead Removal	AT&T Installation	Total Construction Cost
C.C. Power, LLC	\$303,805.00	\$21,240.00	\$325,045.00
Hydaker-Wheatlake	No Bid	No Bid	No Bid
J. Ranck Electric, Inc.	\$454,342.00	\$7,505.00	\$461,847.00
Kent Power, Inc.	\$503,307.24	\$43,630.00	\$549,937.24
Newkirk Electric	No Bid	No Bid	No Bid
Roemer Utility Services	No Bid	No Bid	No Bid

Hydaker-Wheatlake submitted a formal no-bid letter citing issues with current work load constraints at this time, Roemer Utility Services attended the mandatory pre-bid meeting but did not submit a bid, and no documentation was received from Newkirk Electric.

Staff recommends selecting C.C. Power, LLC as they are the low bidder for the defined scope of work. Staff estimated \$328,000 in contract labor for this project; the total cost for underground

FOR THE LIGHT & POWER BOARD MEETING OF SEPTEMBER 13, 2016

installation and overhead removal submitted by C.C. Power, LLC is \$2,955 under budget. If the Board is in agreement, the following motion is recommended:

**MOVED BY _____, SECONDED BY _____,
THAT THE BOARD AUTHORIZE THE CHAIRMAN AND SECRETARY TO ENTER
INTO A CONSTRUCTION CONTRACT FOR THE ORCHARD HEIGHTS OVERHEAD
TO UNDERGROUND CONVERSION: PHASE I PROJECT WITH C.C. POWER, LLC
IN THE LUMP SUM AMOUNT OF \$325,045; SUBJECT TO APPROVAL AS TO
SUBSTANCE BY THE EXECUTIVE DIRECTOR AND AS TO FORM BY GENERAL
COUNSEL.**

**FURTHER, AUTHORIZING THE EXECUTIVE DIRECTOR TO EXECUTE WORK
ORDERS FOR SERVICES AND ADMINISTER AMENDMENTS AND CHANGE
ORDERS THAT ARE IN THE BEST INTEREST OF THE LIGHT AND POWER
DEPARTMENT.**



**TRAVERSE CITY
LIGHT & POWER**

**Traverse City Light & Power
Bid Tabulation Form**

Project Name: Orchard Heights Overhead to-Underground Conversion Construction and Cutover Services.

BIDDER	BID SENT	BID SECURITY	UG INSTALL AND OH REMOVAL	AT&T INSTALL	TOTAL CONSTRUCTION COST	REMARKS
C.C. Power, LLC 3850 Beebe Rd NW Kalkaska, MI 49646	8/24/2016	10%	\$ 303,805.00	\$ 21,240.00	\$ 325,045.00	Low Bidder
Hydaker-Wheatlake 420 S Roth St #B Reed City, MI 49677	8/24/2016	NO BID	NO BID	NO BID	NO BID	NO BID (Did not attend pre-bid meeting)
J. Ranck Electric, Inc. 1993 Grover Parkway Mt. Pleasant, MI 48858	NA	10%	\$ 454,342.00	\$ 7,505.00	\$ 461,847.00	-
Kent Power, Inc. 90 Spring Street Kent City, MI 49330	8/24/2016	10%	\$ 503,307.24	\$ 43,630.00	\$ 549,937.24	-
Newkirk Electric 1875 Roberts Street Muskegon, MI 49442	8/24/2016	NO BID	NO BID	NO BID	NO BID	NO BID (Did not attend pre-bid meeting)
Roemer Utility Services 9679 US 131 NE Mancelona, MI 49659	NA	NO BID	NO BID	NO BID	NO BID	Attended pre-bid meeting

This is to certify that at 2:00:00 PM , local time on September 7, 2016 , the bids tabulated herein were publicly opened and read.

Traverse City Light & Power

By: *Blake Wilson*

Blake Wilson, System Engineer

**TRAVERSE CITY
LIGHT AND POWER BOARD**

Minutes of Regular Meeting
Held at 5:15 p.m., Commission Chambers, Governmental Center
Tuesday, August 23, 2016

Board Members -

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

Absent: John Taylor

Ex Officio Member -

Present: Marty Colburn, City Manager

Others: Karla Myers-Beman, Pete Schimpke, Kelli Schroeder, Scott Menhart, Jennifer St. Amour

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

Bob Spence requested item 2b be removed from the Consent Calendar for full discussion.

Item 2 on the Agenda being Consent Calendar

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

- a. Minutes of the Regular Meeting of August 9, 2016.
- b. *Removed.*

CARRIED unanimously.

Items Removed from the Consent Calendar

- a. Consideration of approving a contract exception with CC Power, LLC.

The following individuals addressed the Board:

Pete Schimpke, Manager of Operations & Engineering
Karla Myers-Beman, Controller

Moved by Spence, seconded by Shamroe, that the Light & Power Board approves granting a contract exception with CC Power, LLC for the work pertaining to the Pole Replacement Project's obstructed and joint use poles that exceed five work days.

Item 3 on the Agenda being Unfinished Business

None.

Item 4 on the Agenda being New Business

1. Consideration of an updated organizational chart and approval of job descriptions.

The following individuals addressed the Board:

Kelli Schroeder, Manager of HR & Communications
Pete Schimpke, Manager of Operations and Engineering
Karla Myers-Beman, Controller

Moved by McGuire, seconded by Palisin, that the Board approves the changes to the organizational chart, the ACT group salary ranges and the job descriptions for the System Engineering/Key Accounts, Senior Field Technician and Field Supervisor positions as presented.

CARRIED unanimously.

2. Consideration of authorizing professional engineering and contract management services with GRP Engineering, Inc.

The following individuals addressed the Board:

Pete Schimpke, Manager of Operations and Engineering
Michael McGeehan, GRP Engineering, Inc.

Moved by Spence, seconded by Shamroe, that the Board authorizes the Chairman and Secretary to enter into an agreement with GRP Engineering, Inc. for professional engineering and contract management services related to the 2016 Distribution Circuit Rehabilitation Circuit BW-31 Project in the not to exceed amount of \$74,750; subject to approval as to substance by the Executive Director, and as to form by General counsel.

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. Karla Myers-Beman proposed paperless board meeting packets.
 2. Pete Schimpke explained the emergency purchase for Cass Road Substation.
 3. Pete Schimpke presented the system study update.
 4. Kelli Schroeder reported on the annual seedling giveaway.
- c. From Board.

Jeff Palisin indicated that Consumer's Power was putting in a smart meter at his business address.

Item 7 on the Agenda being Public Comment

There being no objection, Chairman Geht declared the meeting adjourned at 6:16 p.m.

/js

Tim Arends, Secretary
LIGHT AND POWER BOARD

DRAFT



TRAVERSE CITY
LIGHT & POWER

To: Light & Power Board
From: Tim Arends, Executive Director
Date: September 1, 2016
Subject: City Contribution Policy

At the request of the Chairman this item is appearing as a new business item so that Board members may take certain action(s) it deems appropriate following discussions of the various issues presented.

The Board approved Strategic Plan contains the following goal:

Develop a board policy to provide guidance as to the appropriate utility contribution for city projects above the Charter required annual contribution.

Staff is working with the Ad Hoc Board Committee and an outside consultant to develop a survey to gather feedback from customers to be used in the development of a policy.

This policy should provide the Board guidance on evaluating utility requested contributions to various city projects that will take into consideration cash availability, rate considerations, and the appropriateness of the contribution based on the type and extent of the request.

A "funding survey" was completed in relation to this goal and was presented a few months ago. The results are attached for your reference.

The next step in addressing this goal is to determine what action, if any, the board would like to take in regard to creating a policy related to financial contributions from the utility to the City above and beyond the City Charter required city fee.

Attached is an updated spreadsheet that details several years of contributions to the City for various items. I will provide some historical information, as I know it, and offer some options for the Board in the way of motions. These motions are not necessarily staff recommended, only meant to assist the Board on these policy decisions. Of course, the Board can make any motion it desires on any of the issues, or none at all.

- **City Fee:** This represents 5% of the utility's gross revenues, as required by City Charter that goes directly into the City's General Fund. It represents approximately 13% of the City's General Fund budget. This amount cannot be increased or decreased without a vote of the electorate.
- **Street Lighting Expense:** In accordance with a joint resolution (attached for your reference) by the TCL&P Board and the City Commission, in 2010 TCL&P began charging its budget, as an expense, for the tariff rate for street lights. The amount of \$188K per year used to be charged to the city's general

fund. The City Manager, at the time, looking at deficit spending in the general fund proposed this and it was approved. TCL&P general counsel opinion did not recommend this action; however, a conflicting opinion from the city attorney that moved it forward for approval.

The following motions could be considered by the board related to this issue:

1. THAT THE BOARD INCLUDES IN ITS CITY CONTRIBUTION POLICY THE ELIMINATION OF TCL&P PAYING FOR THE COST OF STREET LIGHTS EFFECTIVE WITH THE FISCAL YEAR BEGINNING JULY 1, 2017.
 2. THAT STAFF SENDS PROPER NOTICE TO THE CITY OF THE CANCELANATION OF THE JOINT STREET LIGHTING POLICY; AND FURTHER COMENCES CHARGING THE CITY THE TARIFF RATE FOR STREET LIGHTING.
- **Traffic Signal Maintenance:** In 2013 TCL&P entered into a formal agreement with the city to take over maintenance of traffic signals (*The actual transfer occurred in February 2010 and TCL&P starting paying for these services at that time*). The agreement is attached for your reference.

This activity was performed by TCL&P in the 1980's and transferred to the city when an employee retired. The City dedicated two employees to this operation who also worked as Equipment Operators in the Streets Department when not doing signal work.

Only one employee from the city came to TCL&P and the utility hired another employee. These employees maintain all signals for the city, county and state within the county. The county and state reimburse the utility for actual work on their signals, however, in accordance with the agreement, TCL&P absorbs the cost of maintenance on city owned signals. These employees also perform underground staking and other tasks for TCL&P when not performing signal work.

The annual net cost of this operation is approximately \$130K.

Motions, if any, related to this issue are as follows:

1. THE BOARD DIRECTS STAFF TO PROVIDE THE ONE YEAR NOTICE TO THE CITY OF CANCELANATION OF THE TRAFFIC SIGNAL MAINTENANCE AGREEMENT CAUSING THIS ACTIVITY TO BE REVERTED BACK TO THE CITY.
2. THE BOARD DIRECTS STAFF TO PROVIDE THE 30 DAY NOTICE TO THE CITY OF RENEGOTIATING THE TRAFFIC SIGNAL MAINTENANCE AGREEMENT FOR THE PURPOSES OF CHARGING THE CITY FOR ACTUAL MAINTENANCE PERFORMED ON CITY SIGNALS.

FOR THE LIGHT & POWER BOARD MEETING OF SEPTEMBER 13, 2016

- **Community Development Fund:** The utility no longer budgets for contributions through this type of program. When a certain request is made, such as the contribution to the Clinch Park Redevelopment project, it requires approval of the governing body, City Commission, in accordance with state law. A municipal utility cannot make contributions without governing body approval.
- **Other Special Projects:** On a case-by-case basis the utility has been requested to fund a variety of "special projects." There is no standing budget for these types of requests and funding is determined as the issues arise. Some of the projects were funded with PA295 required energy efficiency funds. I don't believe there would be a motion associated with this discussion as decisions are made when requests come forward.

One exception is contributions for the expansion of street lighting such as West Front Street and Garland Street. Attached for your reference are the current Street Lighting and Decorative Lighting Policies. While this has been discussed by the Board to varying degrees in the past, further discussion should occur as to whether the utility should continue funding additional lighting expansions, and if so to what degree. These amounts are typically within the utility's Six Year Capital Improvements Plan as "conceptual," as details are not provided with their inclusion in the Plan.

After discussions any of the following motions, or any other motion could be entertained by the board (if any):

1. **THAT THE BOARD SUSPENDS ITS DECORATIVE AND STREET LIGHTING POLICIES AND APPOINTS AN AD HOC COMMITTEE TO REVIEW THOSE POLICIES WITH RECOMMENDATIONS ON ANY CHANGES TO BE BROUGHT TO THE BOARD FOR ITS CONSIDERATION.**
 2. **THAT THE BOARD INCLUDE IN ITS CITY CONTRIBUTION POLICY THE PROHIBITION FROM UTILIZING UTILITY FUNDS FOR FUTURE STREET OR DECORATIVE LIGHTING PROJECTS.**
 3. **THAT THE BOARD DIRECTS STAFF TO REVIEW THE STREET LIGHTING AND DECORATIVE LIGHTING POLICIES TO BETTER DEFINE THE SPECIFIC COMPONENTS OF LIGHTING PROJECT EXPANSIONS THAT WILL BE PAID FOR FROM UTILITY FUNDS; AND FURTHER DIRECTS STAFF TO BRING THOSE RECOMMENDED CHANGES TO THE BOARD FOR ITS CONSIDERATION.**
- **Holiday Lighting in the Downtown:** When the first streetscapes project was completed in the downtown (late 80's) the local cable company, telephone company, and TCL&P participated in installing and removing the holiday lights. When that cooperation disappeared TCL&P took on the full responsibility and has done so for the past few decades. In recent years this has become a burden to the utility having the staff to install/remove in a timely manner. What was originally a two block area has expanded to four blocks of Front Street, Old

Town, State and Park Streets. Last year TCL&P hired a contractor for most of the work and TCL&P did one block. This worked out much better for L&P staff and the lights were installed/removed in a timely manner. However, there were still complaints about the sparsely lit trees.

While TCL&P has paid for all of the LED lights used in the downtown, there simply are not enough to get the coverage on the trees that people used to see because the trees have grown so large. The question is should TCL&P continue to shoulder the full responsibility of this activity? Last year I reached out to other area utilities for assistance and they declined. I then reached out to the city, DDA and DTCA for financial participation and the DDA contributed \$2,300 of the \$43K cost.

The following are motions you may want to consider regarding this issue, unless you would like to continue with past practice

1. THAT THE BOARD DIRECTS THE EXECUTIVE DIRECTOR TO WORK WITH THE CITY AND DDA ON AN AGREEMENT THAT WOULD EQUALLY DIVIDE THE FINANCIAL COST OF INSTALLING/REMOVING HOLIDAY LIGHTING IN THE DOWNTOWN FOR CONSIDERATION OF ALL BOARDS INVOLVED IN THE AGREEMENT.

2. THAT THE BOARD EXCLUDE HOLIDAY LIGHTING PARTICIPATION GOING FORWARD IN ITS CITY CONTRIBUTION POLICY.

- Cost Sharing Services Between the City and TCL&P: The spreadsheet shows the areas where TCL&P uses city employees for certain services and the City uses TCL&P employees. The net dollar amount is not significant to TCL&P's budget, however, the services provided are critical to its operations. Without this cost sharing TCL&P would have to hire staff to perform these duties and a significantly higher cost.

These duties include (not all encompassing): Money management including investments, audit supervision (both required by Charter), accounts payable, customer service, billing, collections, meter reading, some accounting work, limited human resources assistance.

As I've stated before, the model we have in working with the city provides a tremendous benefit to both the city and TCL&P. If these services were not shared it would cause rates for TCL&P, water, and wastewater to be higher for all residents.

TCL&P and the City work together to periodically evaluate the cost sharing percentages to be sure that each entity is being charged appropriately.

In summary, I have provided you detail and some explanation of all of the financial contributions from the electric utility to the city to the best of my knowledge. The utility is an integral component within the framework of the city and efficiencies with many of the other departments do exist and should exist.

Traverse City Light and Power
 Electric Fund
 City Fee/Special Projects/Expenditures Absorbed/Cost Sharing
 May 2015 Updated 4/19/2016 Updated 8/25/2016

Description	FYE 2010-11	FYE 2011-12	FYE 2012-13	FYE 2013-14	FYE 2014-15	FYE 2015-16	FYE 2016-17	Total
	1,511,219.16	1,598,157.39	1,599,865.97	1,775,851.33	1,863,259.00	1,790,000.00	1,870,000.00	
General Fund Expenditures absorbed by TCL&P								
Street Lighting	183,552.72	183,539.57	183,692.25	183,972.60	187,214.71	188,092.32	188,092.32	1,298,156.49
Traffic Signal								
Traffic Signal Employee (1 full-time)	86,026.93	101,628.54	99,063.42	107,865.04	114,255.56	119,870.28	122,906.22	751,615.99
Traffic Signal Truck	21,192.00	28,440.00	28,500.00	20,700.00	20,700.00	31,200.00	29,700.00	180,432.00
Traffic Signal Materials	18,871.29	10,548.17	45,624.61	12,211.82	4,120.06	1,767.13	10,000.00	103,153.08
Less MDOT Revenue	(6,844.99)	(2,624.76)	(2,055.54)	(2,455.95)	(603.65)	(1,067.49)	(1,000.00)	(16,652.38)
GT County Road Commission	(25,657.32)	(28,984.12)	(22,263.28)	(18,657.31)	(21,624.51)	(22,821.21)	(22,000.00)	(162,007.75)
Subtotal traffic signal	93,587.91	109,007.83	148,869.21	119,673.60	116,847.46	128,948.71	139,606.22	856,540.94
Total General Fund Expenditures absorbed by TCL&P	277,140.63	292,547.40	332,561.46	303,646.20	304,062.17	317,041.03	327,698.54	2,154,697.43
Special Projects funded by TCL&P								
Community Investment Fund	15,000.00	-	1,000,000.00	-	-	-	-	1,015,000.00
Wind Turbine/Solar Energy System Unit	-	-	-	20,850.00	-	-	-	20,850.00
West Front St Lighting Project	-	-	-	-	-	506,131.62	-	506,131.62
LED Holiday lighting	-	-	-	-	5,863.93	9,962.32	-	15,826.25
Solar/wind street lights (PILOT EO FUNDING)	-	-	-	-	4,000.00	-	-	4,000.00
Garland Street Lighting Project	-	-	-	-	-	-	169,000.00	169,000.00
Installing Lights for Holiday Season	64,473.31	51,469.28	32,426.63	33,295.22	25,714.89	43,535.08	43,535.08	294,449.49
Less donation by DDA	-	-	-	-	-	(2,300.00)	-	(2,300.00)
Total Special Projects funded by TCL&P	79,473.31	51,469.28	1,032,426.63	54,145.22	35,578.82	557,329.02	212,535.08	2,022,957.36
Cost Sharing Services between the City and TCL&P								
Human Resources	11,227.83	10,931.08	18,867.15	42,107.28	33,288.78	20,000.00	20,000.00	156,422.12
Treasurer Office Wages	215,442.67	232,286.00	228,450.82	240,774.26	238,160.53	237,416.73	246,997.17	1,639,528.18
Meter Reading Wages	(209,824.95)	(223,686.00)	(209,686.04)	(222,437.85)	(225,880.66)	(225,651.97)	(195,960.38)	(1,520,127.85)
Garage overhead allocations	-	24,999.96	24,999.96	25,500.00	25,500.00	26,016.00	26,796.00	153,811.92
Total cost sharing services between the City and TCL&P	16,845.55	44,531.04	62,631.89	85,943.69	64,068.65	57,780.76	97,832.79	429,634.37
Grand Total	\$ 1,884,678.65	\$ 1,986,705.11	\$ 3,027,485.95	\$ 2,219,586.44	\$ 2,266,968.64	\$ 2,722,150.81	\$ 2,508,066.41	\$ 16,615,642.01

- Notes
- 1) 2015-16 fiscal year city fee was based on actual (West Front St., LED Holiday Lighting, Lights for Holiday Season, Street Lighting, Traffic Signal Materials, MDOT Revenue, GT County Road Commission Revenue) and budgeted amounts.
 - 2) \$15,000 in Community Investment Fund was for universal small boat launch/Clinch Park.
 - 3) Traffic signal employee costs was taken from corresponding year budget payroll spreadsheets.
 - 4) Traffic signal truck was vehicle 106. Does not include gas consumption or normal maintenance.
 - 5) Traffic signal materials was budgeted expenditures for the 2015-16 year.
 - 6) Street lighting obtained from utility billing system.
 - 7) Installing lights for holiday season costs directly from Cityworks and Shine contract 2015-16 fiscal year and internal labor/equipment.
 - 8) MDOT Revenue and GT County Road Commission is an estimation for 2015-17 year.
 - 9) Human Resource Allocation based on actual amount paid with 2015-16 & 2016-17 estimated.
 - 10) Treasurer Office and Meter Reading Wages based on payroll spreadsheets.
 - 11) Garage costs only include monthly rate for overhead.



TRAVERSE CITY
LIGHT & POWER

2016 City Project Funding Research

May 24, 2016

Cathlyn Sommerfield, Ph.D.
CS RESEARCH & CONSULTING, LLC |

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EXECUTIVE SUMMARY

- Mail survey conducted with a randomly selected sample of TCL&P rate payers, stratified to target a final sample comprised of 20% residential and 80% commercial/industrial, with sampling stratification designed to be representative of approximate revenue contribution of each rate payer segment to the whole. Final sample comprised of 50 residential and 385 commercial/industrial rate payers.
- The majority of responding rate payers (71%) reported their utility bill is 0 – 15% of their monthly budget, with 17% of respondents reporting a percentage of 16% – 30%, and approximately 4% reporting a percentage 31% or higher; 8% of respondents indicated they are Uncertain as to the percentage of their utility bill to monthly budget.
- When asked “*Do you support TCL&P spending rate payers dollars to fund non-utility related City of Traverse City general fund projects with an understanding that it will contribute to a rate increase in the future?*” approximately 27% of responding rate payers indicated Yes or Uncertain, while approximately 73% indicated No.
 - Percent of utility bill to monthly budget was found to significantly interact with expressed support. That is, Rate Payers reporting their utility bill is 0-15% of their monthly budget were significantly more likely to indicate Yes with regard to support in Q2, and significantly less likely to indicate No or Uncertain; Rate Payers reporting their utility bill is 16% or more of monthly budget were significantly more likely to indicate No or Uncertain with regard to support, and significantly less likely to indicate Yes; Rate Payers reporting they are Uncertain as to the percent of their utility bill to monthly budget were significantly more likely to indicate No or Uncertain with regard to support.

Respondents indicating No regarding support had at this point completed the survey; those indicating Yes or Uncertain (n=115) were asked to continue on to the next question.

- When asked what amount they would support going towards a non-utility related City general fund projects or projects, the single largest group of responding rate payers (20%) indicated \$250,000 - \$500,000, with an additional 19% indicating \$1 million and above. Approximately 35% indicated they were Uncertain as to the amount they would support.
- Responding rate payers were then asked “*Would you support a change in the City Charter that would set a maximum percentage of gross revenue to be transferred to the City specifically for general fund projects, above the required 5%?*” Approximately 34% indicated Yes, with 26% indicating Uncertain, for a total of 60% Yes/Uncertain; 40% indicated they would not support this change in the charter.

Respondents indicating No regarding support had at this point completed the survey; those indicating Yes or Uncertain (n=66) were asked to continue on to the next/last question.

- When asked “*Considering amounts based on the current 2015-2016 fiscal year, which of the following percent increases do you feel is most appropriate?*” the single largest group of responding rate payers (30%, n=19) indicated 2%, currently \$750,000; approximately 35% (n=22) indicated they were Uncertain as to percent increase considered appropriate.

1.0 OVERVIEW



The Mission of Traverse City Light & Power is to provide the Public Power benefits of safety, lower rates, high reliability, local control and exceptional customer service to the City and its residents and all Traverse City Light & Power customers.

1.1 Objective The objective of the current research was to gather feedback from customers to be used in the development of a policy that would provide the TCL&P Board guidance on evaluating utility requested contributions to various city projects that will take into consideration cash availability, rates and the appropriateness of the contribution based on the type and extent of the request.

1.2 Methodology A mail survey was conducted with a randomly selected sample of TCL&P rate payers, stratified to target a final sample comprised of 20% residential and 80% commercial/industrial. This sampling stratification was designed to be representative of the approximate revenue contribution of each rate payer segment to the whole. The sampling plan and projected response rate targeted an approximate +/-5% margin of error for commercial/industrial ratepayers and +/-11% for residential ratepayers.*

A total of 2,000 surveys were mailed, made up of a sample of 470 residential and 1,530 commercial/industrial rate payers, the goal being a 20% response rate with a single mailing. Fifty-three surveys were returned undeliverable – 34 commercial and 19 residential – bringing valid mail total to 1,947** for an overall response rate of approximately 22.5%***. Based upon a final sample of 50 residential rate payers, margin of error is +/-13.8%; based upon a final sample of 385 commercial/industrial rate payers, margin of error is +/-4.41% (see Section 1.2.1: Notes and Assumptions).

1.2.1 Notes and Assumptions A mail survey methodology affords the respondent complete control in response. In the case of this research, the survey was noted to conclude with a “No” response to the second question; however, a percentage of those responding “No” went on to complete a portion, or all, of the remaining survey questions. This report includes survey results based upon responses following the noted survey routing. However, all survey responses were captured and are presented in their entirety in Appendix A. In addition, all respondent comments are included in Section 2.7: Additional Comments.

To note, there is slight overlap assumed in residential and commercial/industrial respondents, with the latter potentially reflecting a small percentage of residential response. This is due to respondent noted reference to each perspective – that is, business decision makers who also maintain residential accounts – and to an intersection of commercial/industrial and residential mailings. Based on an assumed 22.5% response rate by group, this can be recognized in the calculation of range in final sample and margin of error for the commercial/industrial rate payer group of 337 – 385 and +/-4.41% to +/-4.79%, respectively.

*Based upon total unduplicated population of approximately 1,739 commercial/industrial and 8,262 residential ratepayers.

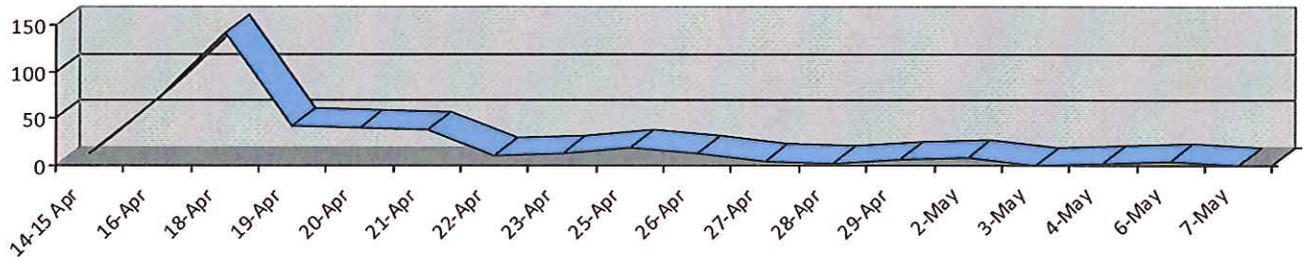
**451 residential and 1,496 commercial/industrial

*** Calculated response rate and analysis does not include 11 surveys received after data entry close.

2.0 SURVEY RESULTS

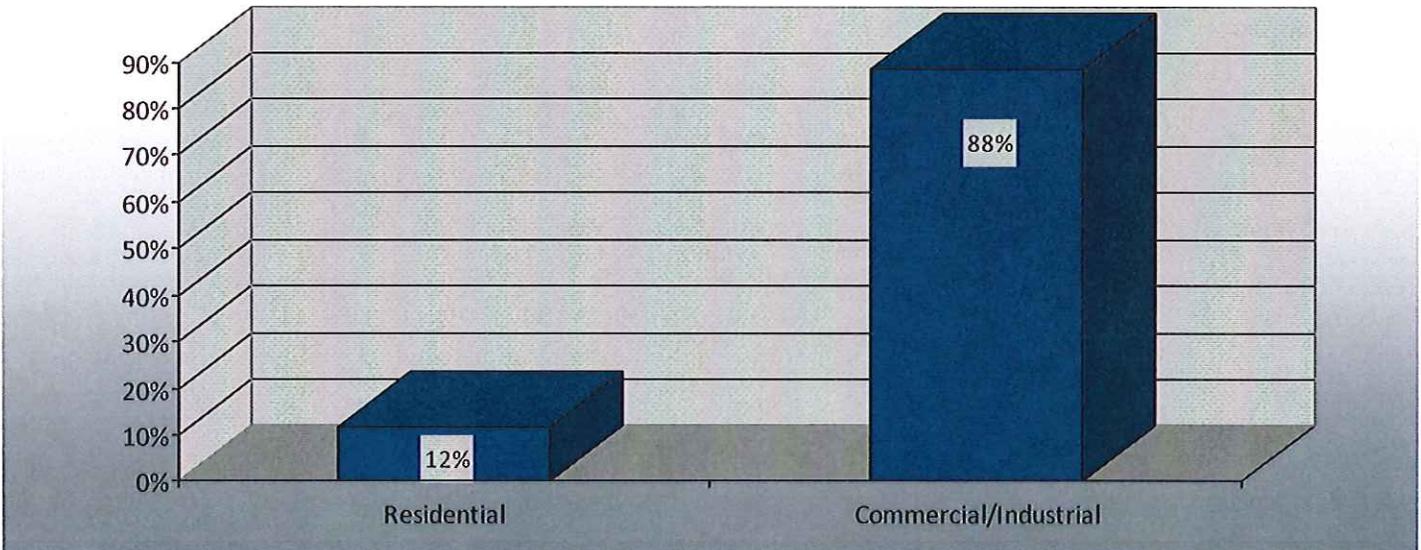
2.1 Return Pattern and Rate Payer Type

Figure 1. Survey Return Pattern



The majority of surveys (83%) were returned by the requested date of 4/22/16. Surveys received through 5/7/16 were included in analysis.

Figure 2. Rate Payer Type



	%	count
Residential	11.5%	50
Commercial/Industrial*	88.5%	385

Rate Payer Type was analyzed against all other survey variables, with results identifying no statistically significant interaction. That is, residential and commercial/industrial respondents did not vary significantly in expressed support on Question 2 or any subsequent item response.

2.2 Question 1: Utility Bill – Percent of Monthly Budget

Figure 3. On average, what percent of your monthly budget is your utility bill?

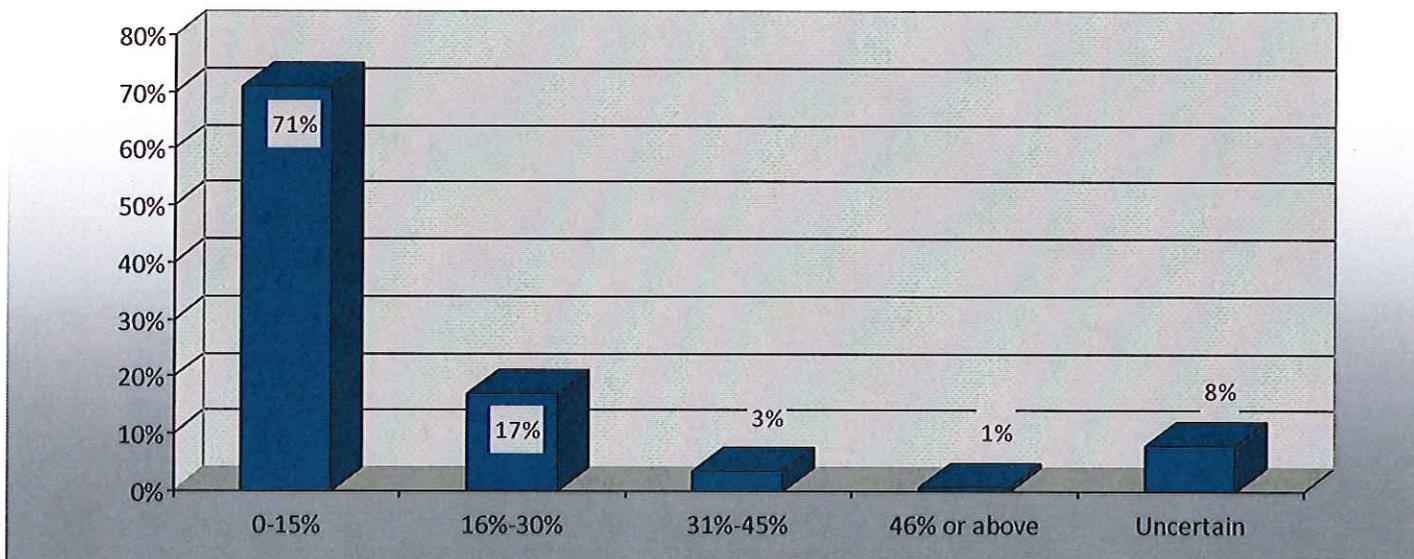


Table 2. On average, what percent of your monthly budget is your utility bill?

	%	count
0 - 15%	70.8%	293
16% - 30%	17.1%	71
31% - 45%	3.4%	14
46% or above	0.7%	3
Uncertain	8.0%	33

Percent of utility bill to monthly budget significantly interacts with support expressed in the following question: "Do you support TCL&P spending rate payers dollars to fund non-utility related City of Traverse City general fund projects with an understanding that it will contribute to a rate increase in the future?" That is, Rate Payers reporting their utility bill is 0-15% of their monthly budget were significantly more likely to indicate Yes with regard to support in Q2, and significantly less likely to indicate No or Uncertain; Rate Payers reporting their utility bill is 16% or more of monthly budget were significantly more likely to indicate No or Uncertain with regard to support, and significantly less likely to indicate Yes; Rate Payers reporting they are Uncertain as to the percent of their utility bill to monthly budget were significantly more likely to indicate No or Uncertain with regard to support.

		Percent of utility bill to monthly budget		
		0-15%	16% and above	Uncertain
Do you support TCL&P spending rate payers dollars to fund non-utility related City of Traverse City general fund projects with an understanding that it will contribute to a rate increase in the future?	Yes	19.8%	6.8%	3.0%
	No	69.6%	79.5%	81.8%
	Uncertain	10.6%	13.6%	15.2%
		100.0%	100.0%	100.0%

Respondent comments regarding Q1 include: Too much; "Monthly Budget" - of my business budget, "Utility Bill" - for business electric; \$1,000 or so; Less than 1%; None of your business (2)

2.3 Question 2: Support for Non-Utility Related Funding

Figure 4. Do you support TCL&P spending rate payers dollars to fund non-utility related City of Traverse City general fund projects with an understanding that it will contribute to a rate increase in the future?

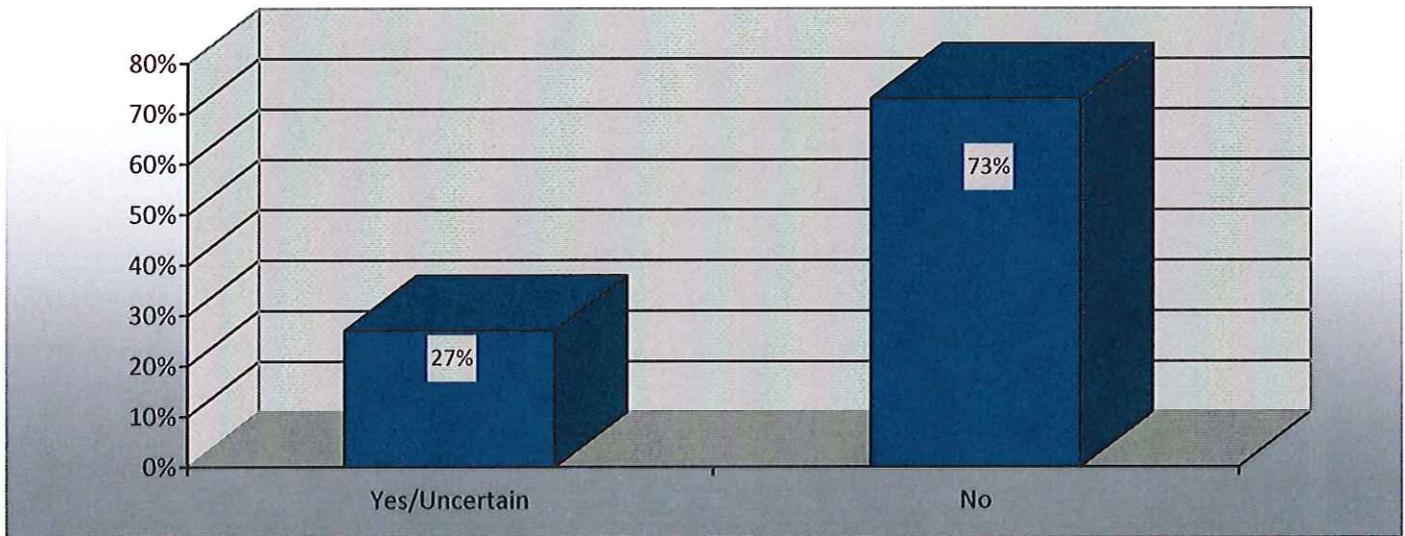


Table 3. Do you support TCL&P spending rate payers dollars to fund non-utility related City of Traverse City general fund projects with an understanding that it will contribute to a rate increase in the future?

	%	count
Yes/Uncertain	26.5%	115
No	73.5%	319

Respondent comments if Yes or Uncertain include:

- If City projects include improvements to or creation of streets.
- Only if environmental impact.
- Seems like you need to mention % increase potential. Not enough info.
- Support renewable energy - no other projects (parks, etc.)

Respondent comments if No include:

- Absolutely Not!
- I don't understand why the city itself does not fund these projects with taxpayers \$. The projects benefit the taxpayers, both residential and commercial.
- I'm in favor of lower rates.
- Manufacturers subsidize the lions share. This is an unfair survey! (regarding residential inclusion)
- Maybe a loan option
- Especially if TCL&P is contributing 12% to the City. Does any other single entity contribute that much? Ridiculous!!
- It appears there are a lot of utility upgrades needed. Let's do that first.
- This is just a hidden tax!!
- We find it a little sneaky that the city puts this on Light & Power, rather than general taxes.
- You would be giving \$ to people with very poorly thought out ideas.
- No!

2.4 Question 3: Amount of Support

Those respondents indicating Yes or Uncertain regarding support in Q2 were then asked what amount they would support going towards a non-utility related city general fund projects or projects. A total of 111 respondents are included.

Figure 5. TCL&P has a \$35 million budget in the 2015-2016 fiscal year. What amount would you support going towards a non-utility related City general fund project or projects?

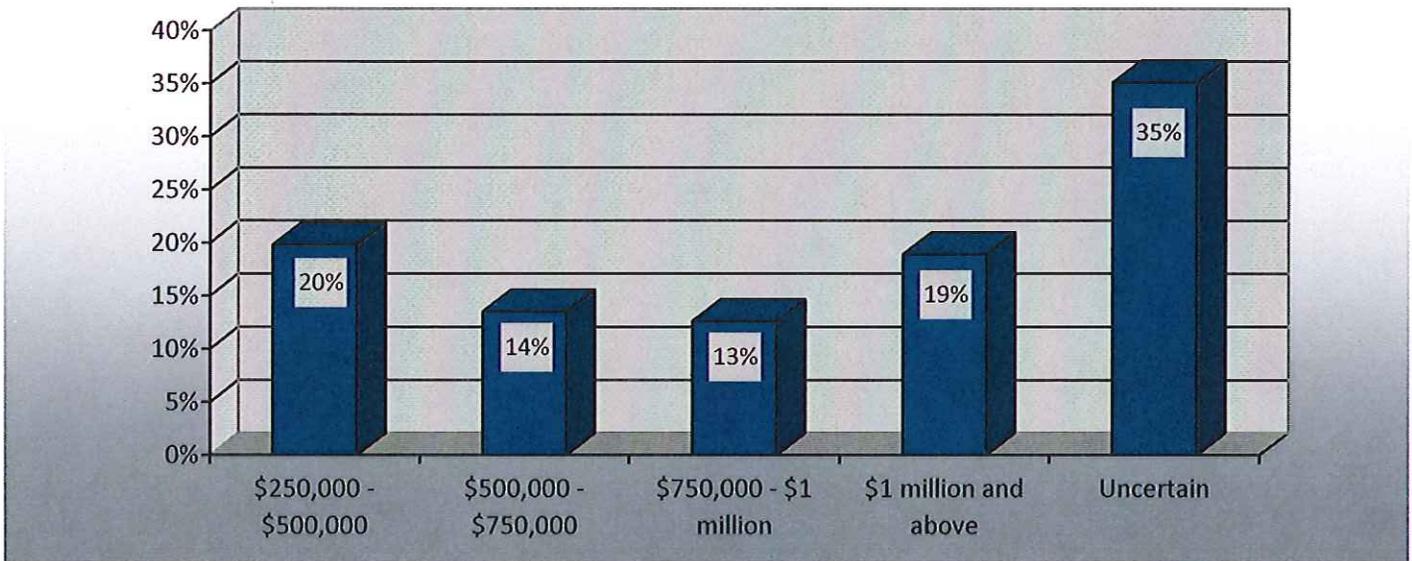


Table 4. TCL&P has a \$35 million budget in the 2015-2016 fiscal year. What amount would you support going towards a non-utility related City general fund project or projects? (n=111)

	%	count
\$250,000 - \$500,000	19.8%	22
\$500,000 - \$750,000	13.5%	15
\$750 - \$1 million	12.6%	14
\$1 million and above	18.9%	21
Uncertain	35.1%	39

- If spent on environmental projects.
- Misleading and confusing question - how much more would I pay each month?
- Bad question - How much is spent now? Past 5 year history? What are the proposed projects?
- If truthful, they don't need any.
- But I agree to fund broadband and solar projects.

2.5 Question 4: Support for Change in City Charter

Figure 6. Would you support a change in the City Charter that would set a maximum percentage of gross revenue to be transferred to the City specifically for general fund projects, above the required 5%?

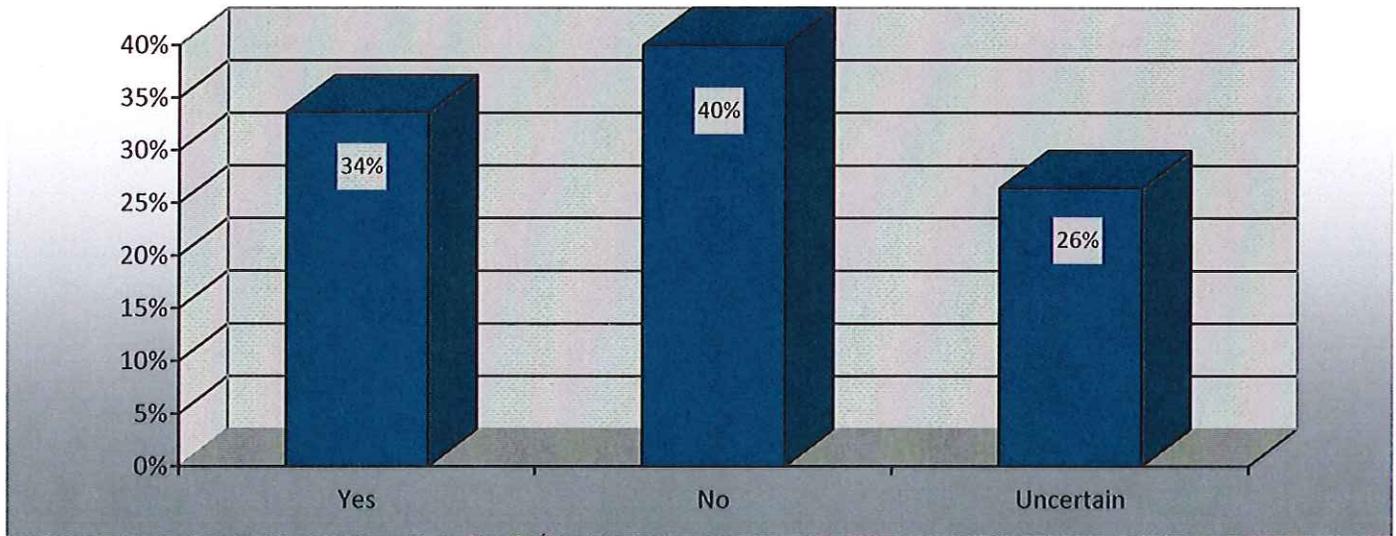


Table 5. Would you support a change in the City Charter that would set a maximum percentage of gross revenue to be transferred to the City specifically for general fund projects, above the required 5%?

	%	count
Yes	33.6%	37
No	40.0%	44
Uncertain	26.4%	29

- Any new street or improvement (Garland, e.g.) should have TCL&P provide infrastructure.
- Project related decision. What is TCL&P net? Need to see historic income statement & balance sheet.
- Need more info!
- Should be flexible.
- Need to read to see that the intention is to divert less to general fund projects.
- Do you mean "maximum available" or "maximum % number?"
- No additional funding.
- Only if you have lots of extra money.

2.6 Question 5: Percent Increase

Those respondents indicating Yes or Uncertain regarding support in Q4 were then asked which of several presented percent increases they feel is appropriate. A total of 63 respondents are included.

Figure 7. Considering amounts based on the current 2015-2016 fiscal year, which of the following percent increases do you feel is most appropriate?

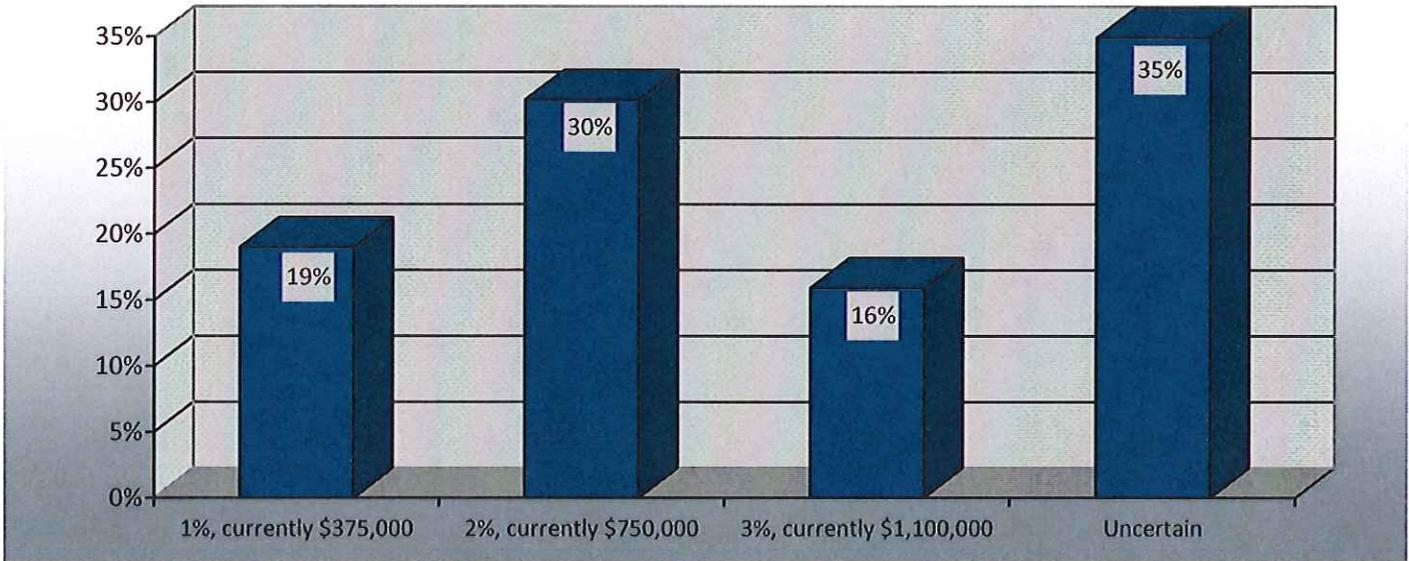


Table 6. Considering amounts based on the current 2015-2016 fiscal year, which of the following percent increases do you feel is most appropriate? (n=63)

	%	count
1%, currently \$375,000	19.0%	12
2%, currently \$750,000	30.2%	19
3%, currently \$1,100,000	15.9%	10
Uncertain	34.9%	22

2.7 Additional Comments

Each bullet represents comment/s from individual/same respondent.

If Yes or Uncertain to “Do you support TCL&P spending rate payers’ dollars to fund non-utility related city of Traverse City general fund projects with an understanding that it will contribute to a rate increase in the future?”

- Q2: Only if environmental impact Q3: If spent on environmental projects Q5: If spent on efficiency and less pollution
- Q2: Support renewable energy - no other projects (parks, etc.)
- Q2: Seems like you need to mention % increase potential - not enough info. Q3: Bad question - How much is spent now? Past 5 year history? What are the proposed projects? Q4: Project related decision. What is TCL&P net? Need to see historic income statement & balance sheet. Q5: Cannot answer without net income information. *General Comment:* Very poor survey.
- Q4: Need more info! Q5: Would like to know about projects before funding!
- Q4: Would you support a change...? Should be flexible.
- Q5: 1 - 2%
- We want to get rid of charter and get fiber!
- Without seeing basic financials, at least expense and revenues, how can anyone make a rational decision?
- All depends on types of projects funded.
- I do not have enough knowledge to make an educated response.
- I'm not going to pretend to know what's best.
- It is hard to be certain about projects that are not specific. We would support utility-based spending on upgrades (like LED lighting), consumer upgrades (like smart meters) and so on (broadband coverage).
- Not enough information to make these choices.
- You don't want comments? There is plenty of extra expenditure in the TCL&P budget that could be reduced. City Commission just needs to appoint a TCLP Board willing to compare to other municipal electrics with smaller admin staffs.

If No to “Do you support TCL&P spending rate payers’ dollars to fund non-utility related city of Traverse City general fund projects with an understanding that it will contribute to a rate increase in the future?”

- Q1: Too much Q3: 0
- Q1: "Monthly Budget" - of my business budget; "Utility Bill" - for business electric
- Q1: \$1,000 or so Q3: 0 Q5: 0
- Q1: Less than 1%
- Q1: None of your business
- Q1: None of your business Q3: 0
- Q2: Absolutely Not!
- Q2: I don't understand why the city itself does not fund these projects with taxpayers \$. The projects benefit the taxpayers, both residential and commercial.
- Q2: I'm in favor of lower rates.
- Q2: Manufacturers subsidize the lions share. This is an unfair survey! (regarding residential inclusion)
- Q2: Maybe a loan option
- Q2: Especially if TCL&P is contributing 12% to the City. Does any other single entity contribute that much? Ridiculous!!
- Q2: It appears there are a lot of utility upgrades needed. Let's do that first. Q3: \$250,000 or less Q5: If I have to pick from above, 1%. I prefer no rate increase.
- Q2: This is just a hidden tax!!
- Q2: We find it a little sneaky that the city puts this on Light & Power, rather than general taxes. *General Comment:* If you are a profitable business, you should support projects like this in the community. The City is making a request - if you decide to do it, let it be charitable rather than putting it off on your customers.

- Q2: You would be giving \$ to people with very poorly thought out ideas. *General Comment:* Thanks for saying NO to Garland Street!
- Q2. No!
- Q3 & Q5: None
- Q3: 0 - \$250,000 Q4: No additional funding
- Q3: If truthful, they don't need any.
- Q3: None Q5: None
- Q3: Zero Q5: Zero
- Q3: 0
- Q3: 0 Q5: 0
- Q3: 0 Q5: None
- Q3: Actually, none.
- Q3: But I agree to fund broadband and solar projects.
- Q3: If any Q4: only if you have lots of extra money.
- Q3: None
- Q3: None, 0 Q5: None, NADA
- Q3: Zero Q5 Zero *General Comments:* That's what city taxes are for, not my utility!
- Q4: Need to read to see that the intention is to divert less to general fund projects.
- Q4: Do you mean "maximum available" or "maximum % number?" Q5: Not clear on math - % of what line item? % available (up to) or set rate?
- Q5: 0%
- Q5: None
- Q5: None, 0
- And thank you for asking!
- What a pathetic excuse for a survey.
- Keep Rates Low!
- Make developers pay! If I build a house, I pay for infrastructure.
- My bill for a part time, very low usage, resident is ridiculously high! I guess this based on minimal usage charges. Doesn't this encourage waste? And discourage conservative usage! Option: Eliminate the City's false budgeting process, spend that 5% to encourage and reward residents for conservative usage! (Commercial Rate Payer - provided comments regarding residential account)

APPENDIX A No Survey Skip Patterns/Based on ALL responses provided

Rate Payer Type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Residential	50	11.5	11.5	11.5
	Commercial	376	86.4	86.4	97.9
	Industrial	9	2.1	2.1	100.0
	Total	435	100.0	100.0	

1. On average, what percent of your monthly budget is your utility bill?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-15%	293	67.4	70.8	70.8
	16%-30%	71	16.3	17.1	87.9
	31%-45%	14	3.2	3.4	91.3
	46% or above	3	.7	.7	92.0
	Uncertain	33	7.6	8.0	100.0
	Total	414	95.2	100.0	
Missing	System	21	4.8		
Total		435	100.0		

2. Do you support TCL&P spending rate payers dollars to fund non-utility related

City of Traverse City general fund projects with an understanding that it will contribute to a rate increase in the future?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	67	15.4	15.4	15.4
	No	319	73.3	73.5	88.9
	Uncertain	48	11.0	11.1	100.0
	Total	434	99.8	100.0	
Missing	System	1	.2		
Total		435	100.0		

3. TCL&P has a \$35 million budget in the 2015-2016 fiscal year.

What amount would you support going towards a non-utility related City general fund project or projects?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	\$250,000 - \$500,000	46	10.6	30.5	30.5
	\$500,000 - \$750,000	15	3.4	9.9	40.4
	\$750 - \$1 million	15	3.4	9.9	50.3
	\$1 million and above	22	5.1	14.6	64.9
	Uncertain	53	12.2	35.1	100.0
Total		151	34.7	100.0	
Missing	System	284	65.3		
Total		435	100.0		

4. Would you support a change in the City Charter that would set a maximum

percentage of gross revenue to be transferred to the City specifically for general fund projects, above the required 5%?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	51	11.7	26.6	26.6
	No	104	23.9	54.2	80.7
	Uncertain	37	8.5	19.3	100.0
	Total	192	44.1	100.0	
Missing	System	243	55.9		
Total		435	100.0		

5. Considering amounts based on the current 2015-2016 fiscal year,

which of the following percent increases do you feel is most appropriate? (Please choose only one)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1%, currently \$375,000	33	7.6	32.7	32.7
	2%, currently \$750,000	19	4.4	18.8	51.5
	3%, currently \$1,100,000	13	3.0	12.9	64.4
	Uncertain	36	8.3	35.6	100.0
	Total	101	23.2	100.0	
Missing	System	334	76.8		
Total		435	100.0		



**Joint Resolution Establishing a Written Policy Regarding the Operations
and Maintenance of the Street Lighting System
Within the Jurisdictional Boundaries of the City of Traverse City**

- Because, Traverse City Light & Power (“TCL&P”) is a component unit of the City of Traverse City and, under Section 175 of the Charter for the City of Traverse City, is responsible for the development, production, purchase and distribution of lighting services within the City of Traverse City as referenced in the City Attorney’s opinion; and
- Because, pursuant to its responsibility under Section 175 of the City Charter, TCL&P shall manage all aspects of the street lighting system within the City of Traverse City’s jurisdictional boundaries (the “System”), including all costs of operation and maintenance. The City shall reimburse TCL&P annually an amount equal to 5% of the street lighting revenues recorded on TCL&P’s financial statements; and
- Because, TCL&P has the knowledge, expertise, and ability to manage and operate the System; therefore, be it
- Resolved,** that the TCL&P Board and the City of Traverse City adopt the following written policy regarding the operations and maintenance of the System as follows:
1. Street Lighting Defined. A lighting system consisting of one or more luminaries with the intended use for public roadway lighting that is open to the State of Michigan or any political subdivision or agency having jurisdiction over public streets or roadways. No private property applications would be considered part of the System.
 2. Engineering & Design. TCL&P shall be responsible for the engineering and design of the System including any new additions. When appropriate, TCL&P shall coordinate installation/replacement of any new or existing street lighting services with the appropriate city department(s).

(Joint Resolution Establishing a Written Policy Regarding the Operations
and Maintenance of the Street Lighting System
Within the Jurisdictional Boundaries of the City of Traverse City)

2

3. Charges for Service. The charges for street lighting services shall be charged to the appropriate local unit of government in accordance with the tariff rates established by TCL&P. For street lights within the System, TCL&P is the appropriate local unit of government.
4. Addition of Street Lights. Any additions to the System shall be at the sole discretion of TCL&P. In the event that the City requests an addition to the System, such request shall be made by the City Manager or his or her designee and the City will agree to pay a one-time fee per light as agreed to by the parties. In all cases, TCL&P retains the right to self fund lighting projects it deems in the best interests of the community or the Light & Power Department.
5. Decorative Street Lighting. Public decorative street lighting shall be available along public streets including neighborhoods and business districts; the process for obtaining approval of a new decorative lighting project shall be governed by the TCL&P Decorative Street Lighting Policy.
6. Security Lighting. From time to time, citizens may request that lighting be installed in a public right of way, such as an alley, for security reasons. These private party requests shall be directed to the City Police Department who may recommend to the City Manager that lighting be installed. This type of lighting shall be subject to the Private Area Lighting Rate or "Security Lighting" offered by TCL&P. Monthly fees for this service shall be billed to the appropriate unit of government, or to the requesting party as directed by the City Manager, through the utility billing system. TCL&P shall not be considered the appropriate unit of government for this type of lighting.

(Joint Resolution Establishing a Written Policy Regarding the Operations
and Maintenance of the Street Lighting System
Within the Jurisdictional Boundaries of the City of Traverse City)

3

7. Removal. The removal of street lights shall be the responsibility of TCL&P. Any City request to remove street lights shall be made in writing by the City Manager. Any liability that may arise as a result of the removal of street lighting as requested by the City shall be the responsibility of the City.



Edward E. Rice
Executive Director and Secretary
Traverse City Light and Power Board

I hereby certify that the above Resolution was adopted at the June 21, 2010, Regular Meeting of the City Commission held in the Commission Chambers, Governmental Center, 400 Boardman Avenue, Traverse City, MI 49684.



Benjamin C. Marentette, Deputy City Clerk

TRAFFIC SIGNAL MAINTENANCE AGREEMENT

THIS AGREEMENT for Traffic Signal maintenance within the city limits of Traverse City, Michigan, is made and entered into as of the 22 day of OCTOBER, 2013, by and between the TRAVERSE CITY LIGHT & POWER DEPARTMENT, a Michigan municipal electric utility, ("TCL&P"), of 1131 Hastings Street, Traverse City, Michigan 49686, and the CITY OF TRAVERSE CITY, a Michigan municipal corporation, (the "City"), of 400 Boardman Avenue, Traverse City, Michigan, 49684,

RECITALS

WHEREAS, the City owns certain electric traffic control devices that it wishes TCL&P to routinely maintain; and

WHEREAS, TCL&P has the personnel and equipment to maintain electronic traffic control devices; and

WHEREAS, this Agreement is made pursuant to the intergovernmental transfers of functions and responsibilities act, MCL 124.531 et seq., and the Intergovernmental Contracts between Municipal Corporations Act, MCL 124.1 et seq.;

NOW, THEREFORE, the parties agree as follows:

1. Purpose. The purpose of this Agreement is to provide for routine and special maintenance of the City's electronic traffic control devices ("City Traffic Signals." To the extent of the duties being undertaken in this Agreement; the City delegates to TCL&P its rights and privileges to maintain the Traffic Signals described herein. Nothing herein shall alter the City's responsibility and obligation under the terms of any agreement providing a funding source for City Traffic Signals within the City's jurisdiction.
2. Term. This Agreement shall be effective as of the above date. The term of this Agreement is for five years from its effective date with an automatic renewal clause for a period of five (5) years unless any of the parties cancel this Agreement with no less than one year's notice to the other party. However, either party may earlier terminate the Agreement by giving a one-year advance notice of the termination specifying the exact date of termination. Furthermore, after the date first written above, either party upon written request to the other party may require the other party to renegotiate within thirty (30) days, any or all cost matters associated with this Agreement.
3. Routine and Special Maintenance. TCL&P agrees to provide routine maintenance, defined in the attached Exhibit A, and special maintenance (trouble calls) for the City Traffic Signals identified in the locations on the attached Exhibit B, which is incorporated herein by reference. The City may add to and subtract from the maintenance or locations listed on Exhibit A or Exhibit B upon not less than seven

(7) days written notice to TCL&P, with such notice being given simultaneously to TCL&P Executive Director and subject to his/her approval. The repair and maintenance of electric service poles and underground facilities are not covered by this Agreement.

4. Routine Maintenance Schedule. Routine maintenance consists of that maintenance which is performed periodically, but which is not in response to a known defect or problem. TCL&P shall conduct such routine maintenance according to a mutually agreed upon schedule and when specially requested by the City. Schedule permitting, such maintenance specially requested shall be completed within thirty (30) business days. Routine maintenance will be scheduled during normal working hours and will normally require two persons working on a signal.
5. Special Maintenance. Special maintenance consists of all maintenance and repair that is not routine maintenance. During normal utility working hours, requests for special maintenance shall be made to TCL&P. Special maintenance will normally be handled by one person, with a second person being called, if needed, or when the aerial bucket truck is used. Special maintenance requests will be handled by a Utility Signal Technician and a second Utility Signal Technician shall be utilized as a back-up person when needed. Efforts will be made to complete special maintenance within the time directed by the requesting party.
6. Back-Up Maintenance. The Grand Traverse County Road Commission has agreed to provide back-up maintenance for routine maintenance and special maintenance on all City Traffic Signals when TCL&P maintenance personnel are unavailable and when requested by TCL&P or the City through its Police Department in the manner that the Road Commission's schedule permits. TCL&P shall immediately notify the City upon expiration or termination of the agreement with the Grand Traverse County Road Commission referenced above (dated 7/24/13) or if either party to that agreement requests the agreement be amended or terminated.
7. Employees and Contractors. In the event of an emergency, either party may, in its sole discretion, discharge the maintenance duties described herein with its own employees or by selecting and contracting with an outside contractor or licensed electrician. In the event a contractor is used, the billing will be sent directly to the party owning the device which received the service from the contractor, who agrees to promptly pay such billing. Contractor invoices for MDOT or percentage shared MDOT signals will be paid by the City.
8. Costs – MDOT Signals. The City shall pay TCL&P's actual cost for all work involved in the maintenance of electronic traffic control devices described in this Agreement for MDOT signals. The City shall pay for the employee's regular hourly rate based on the contemporaneous collective bargaining agreements, per hour, per person, at normal rates or, as necessary, at overtime rates, and shall pay for the minimum hours of call-in time as may be required including a 40% labor overhead charge to cover the cost of employee benefits. The City shall pay the prevailing rental rates for equipment used while maintaining signals.

9. Costs – City Signals. Traverse City Light & Power shall pay actual cost for all work involved in the maintenance of electronic traffic control devices described in this Agreement for City owned signals. TCL&P shall pay for the employee's regular hourly rate based on the contemporaneous collective bargaining agreements, per hour, per person, at normal rates or, as necessary, at overtime rates, and shall pay for the minimum hours of call-in time as may be required including the current labor overhead charge to cover the cost of employee benefits. TCL&P shall pay the prevailing rental rates for equipment used while maintaining signals.
10. Signal Parts. TCL&P will maintain its own inventory of parts used for maintenance and repair of electronic traffic control devices. Inventory owned by TCL&P shall not become the property of the City until the time of installation into the signal. At the time of such installation the ownership for the part shall be transferred to the City.
11. Records. TCL&P shall maintain records required for good maintenance and accounting purposes and shall make those available to the City during normal business hours for inspection.
12. Notices. Notices and requests to be made under this Agreement shall be made in the following manner:

If to the City:

City of Traverse City

Attn: City Manager

400 Boardman Avenue

Traverse City, MI 49684

(231) 922-4440 Telephone

johannes@traverscitymi.gov Email

cc: Benjamin C. Marentette, City Clerk

bmarente@traverscitymi.gov

If to TCL&P:

Traverse City Light & Power Department

Attn: Executive Director

1131 Hastings Street

Traverse City, MI 49686

(231) 922-4940

Telephone

taxands@tclp.org

Email

cc: Karla Myers-Beman

kmyersbe@tclp.org

13. Transfer of Employees. There are no transfers of employees required or contemplated by this Agreement.

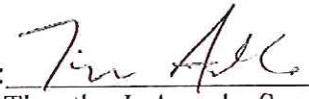
14. Concurrent Resolution. This contract must be approved by concurrent resolution of the governing body of each party.
15. Secretary of State. A copy of this Agreement shall be filed with the Michigan Secretary of State.
16. Independent Contractor. The parties shall be considered an independent contractor and not an agent or employee of the other parties. Each party shall remain responsible for any claims arising out of their own acts or omissions during the performance of this agreement, as provided by law. This agreement is not intended to increase or decrease the parties' liability for, or immunity from, tort claims.
17. Hold Harmless. The parties agree to hold each other, their officers, agents and employees, harmless from and against all claims, damages, losses and expenses, including reasonable attorneys' fees arising out of the performance of this Agreement which are caused in whole or in part by the negligent acts or omissions of a party in performing the service under this Agreement, or that of anyone employed by them to the extent that the parties have insurance coverage for such claims, damages, losses and expenses.
18. Non-Discrimination. The parties agree not to discriminate against an employee or applicant for employment or a matter directly or indirectly related to employment because of race, color, religion, national origin, sex, age, height, weight, marital status, physical or mental disability, family status, sexual orientation, or gender identity. Breach of this covenant may be regarded as a material breach of this Agreement. The parties agree to require similar provisions from any subcontractors.
19. Dispute Resolution. If any party has a dispute with another regarding the meaning, operation or enforcement of any provision of this Agreement, the disputing parties agree to meet and confer to negotiate a resolution of the dispute. They further agree as follows:
 - (a) Mediation. If they are unable to resolve the dispute themselves, and before formally instituting any other dispute mechanism, they shall utilize the services of a mutually acceptable neutral mediator, who meets the qualifications of MCR 2.411, to bring them together in at least one mediation session.
 - (b) Venue. All meetings, hearings and actions to resolve the dispute shall be in Grand Traverse County.
 - (c) Notice. Written notice of a dispute shall be given to the other parties not later than 90 days after the occurrence giving rise to the dispute becomes known or should have become known. Negotiations and mediation shall occur within 60 days after such notice.

20. Entire Agreement. This contract, together with all items incorporated herein by reference, constitutes the entire agreement of the parties. No other statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in this Agreement. All modifications to the Agreement must be made in writing by the parties.
21. Third-Party Beneficiaries. This Agreement confers no rights or remedies on any third party, other than the parties to this Agreement and their respective successors and permitted assigns.
22. Force Majeure. If either party is prevented or delayed in the performance of any of its obligations under this Agreement due to Force Majeure (defined below), that party will provide written notice to the other party specifying the nature and expected duration of the Force Majeure. The performance of the party invoking Force Majeure with respect to any obligation will be excused and the time for performance extended, but only for the period of delay or inability to perform due to Force Majeure. If the total of any period of delay or inability to perform due to Force Majeure asserted by either party during the Term equals or exceeds 30 consecutive days, the other party will have the right, at its option, to either terminate this Agreement by written notice or to continue to excuse the first party's performance for the period of any delay or inability to perform due to Force Majeure. As used in this Agreement, "Force Majeure" shall mean any act of God, fire, casualty, flood, war, strike, lockout, labor trouble or any other circumstances beyond the reasonable control of the party asserting it that prevents or delays the performance of any of its obligations under this Agreement.
23. TCL&P's Responsibility. TCL&P shall perform the work in a good and workmanlike manner and assumes the risk in performing under this Agreement. TCL&P shall be solely responsible and answerable in damages for all improper work, accidents or injuries to person or property.
24. Compliance with Regulations. TCL&P shall comply with all applicable statutes, rules and regulations of all federal, state and local governments and agencies having jurisdiction, and bears the risk of any such authorities or changes thereto.
25. Standard of Conduct. TCL&P shall render all services under this Agreement according to generally accepted professional practices for the intended use of the work or project.
26. Prohibition Against Assignment. This Agreement is intended to secure the service of TCL&P because of its ability and reputation and none of the TCL&P's duties under this Agreement shall be assigned, subcontracted, or transferred without the prior written consent of the City Manager. Any assignment, subcontract or transfer of TCL&P's duties under this Agreement must be in writing.
- 27.

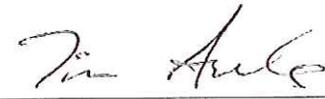
IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date and year first above written.

TRAVERSE CITY LIGHT &
POWER DEPARTMENT

By: 
Pat McGuire, Chairman

By: 
Timothy J. Arends, Secretary

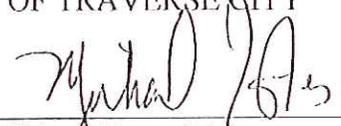
Approved as to Substance:


Timothy J. Arends, Executive Director

Approved as to Form:


W. Peter Doren, General Counsel
Traverse City Light & Power

CITY OF TRAVERSE CITY

By: 
Michael Estes, Mayor

By: 
Benjamin C. Marentette, Clerk

Approved as to Substance:


Jered Ottenwess, City Manager

Approved as to Form:

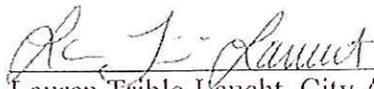

Lauren Tribble-Laucht, City Attorney

EXHIBIT A

MONTHLY ROUTINE MAINTENANCE

- Inspect controller and cabinet for proper operation, damage, and graffiti.
- Check operation of the fan.
- Inspect all vehicular and pedestrian signals for proper operation, alignment, visibility and replace outages found.
- Check operations of all pedestrian pushbuttons and crosswalk signals.
- Verify correct clock settings in the controller, correct as needed.
- Visually check for wear and function of controllers.
- Inspect illuminated street name signs for proper operation, including lamps and photocells.
- Test emergency/transit pre-emption.
- Check that intersection is adequately serving traffic demands.
- Complete maintenance checklist, noting any comments.
- Manually record inspection date and time in controller cabinet and log details in the file checklist on the Server. Send confirmation of monthly inspection with recommendations by intersection to your Supervisor.

3 - MONTH ROUTINE MAINTENANCE (In addition to monthly)

- Visually inspect roadway along loop detectors for possible exposed wires, cracks and pot holes.
- Check manual operation.
- Check pull box covers.
- Check controller cabinet filter.
- Check and verify timing on School Flashers
- Note vegetation preventing access to or visibility of traffic controls.
- Check detector amplifiers and tune if needed.
- Reset vehicle detectors and observe detection operation
- Inspect cameras, clean lenses, and check coaxial connections
- View that camera detection is operational where applicable
- Manually record inspection date and time in controller cabinet and log details in file checklist on the Server. Send confirmation of 3-month inspection with recommendations by intersection to your Supervisor.

6 - MONTH ROUTINE MAINTENANCE (In addition to monthly and 3-month)

- Check ground rod clamp and wire.
- Check wire schematics and records to make sure they are in the cabinet.
- Check operation of ground fault receptacle.
- Measure voltage at service inputs in cabinet and record.
- Visually check integrity of splices.
- Verify controller signal timing plans against the time sheet. Forward any discrepancies to the immediate Supervisor.
- Test the battery back-up system.
- Manually record inspection date and time in controller cabinet and log details in the file checklist on the Server. Send confirmation of 6-month inspection with recommendations by intersection to your Supervisor.

YEARLY ROUTINE MAINTENANCE (In addition to monthly, 3 and 6-month)

- Clean and polish all lenses and reflectors, as needed.
- Test the conflict monitor unit.
- Inspect measurements of overhead equipment. Adjust to min 15' to max 19' height.
- Vacuum and clean controller cabinet and contents.
- Replace cabinet filter.
- Check weatherproof gasket seal on controller cabinets.
- Check for water accumulation and duct sealant.
- Lubricate hinges and lock on controller cabinets
- Tighten and/or secure all lugs and screws.
- Secure all breakers in place.
- Check indicator lamps.
- Check all connectors.
- Check detector extensions.
- Check load switches.
- Check relays.
- Verify flash rate.
- Spot check LED luminosity
- Save and clear log in controller for faults and monitor.
- Manually record inspection date and time in controller cabinet and log details in the file checklist on the Server.
Send confirmation of yearly inspection with recommendations by intersection to your Supervisor.

Exhibit B

Traffic control inventory-Signals and Flashing Beacons

Traverse City

Front/Cass	
Front/Union	
Front/Park	
State/Union	
State/Cass	
Union/Eighth	
Union/Fourteenth	
Cass/Eighth	
Cass/Fourteenth	
Fourteenth/Veterans dr.	
<u>Eighth/Boardman</u>	
Eighth/Woodmere	
Eighth/Garfield	
Woodmere/Carver	
Woodmere/Hannah	
Garfield/Hannah	
Garfield/Boon	
Parsons/Hastings	
Garfield/Carver	
Parsons/Airport Access	
Woodmere/Eighth	
Eighth/Rose	
State/Boardman	Flasher
WestFront/Pine	Flasher
Eighth/Lake	Flasher
Carver/Traverse Heights	School Flasher
Garfield/Oak Park	School Flasher
Eastern/Central High	School Flasher
Seventh/Central	School Flasher
Eighth/Central	School Flasher
Fourteenth/Glen Loomis	School Flasher
901 Carver /Rose	Cross walk sign
Garfield/Oak Park	Cross walk sign
West Front Between Park/Front	Cross walk sign
West Front Between Union/Cass	Cross walk sign
Cass Between State/Union	

Traffic Control Inventory – Signals & Flashers

US-31:M37: Division/Front Street
US-31:M37: Division/14th, Silver Lake
US-31:M37: Division/7th Street
US-31:M37:M22: Grandview Parkway/Park
US-31:M72:M22: Grandview Parkway/Division
US-31:M72: Grandview Parkway/Union
US-31:M72: Munson/8th Street
US-31:M72:M37: Front/Grandview Parkway
US-31:M72: Munson/Airport Access
US-31:M72:M37: Front/Garfield
US-31:M72:M37: Front/Barlow
US-31:M72: Front/Fair

Light and Power Department
City of Traverse City, MI
Adopted: November 13, 1990
Amended: June 11, 2013

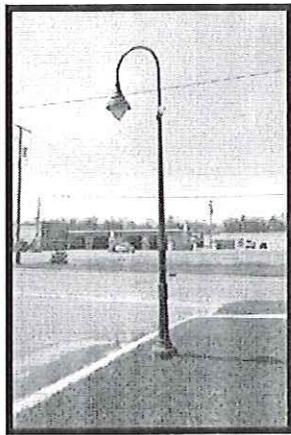
DECORATIVE LIGHTING POLICY

TO PROVIDE guidance to the Department in facilitating the development of Decorative Lighting Projects within the utility service area for Traverse City Light & Power Board consideration of approval. Further, to define ownership, operation & maintenance, system replacements, and funding options.

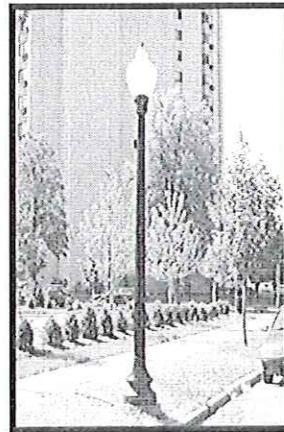
DECORATIVE LIGHTING DEFINED: A system consisting of one or more luminaries where the Department has an existing distribution system with secondary voltage available that is defined as an approved decorative lighting style under the "MATERIALS/EQUIPMENT" section of this policy, or is otherwise approved as a decorative lighting style by the Executive Director. There are three types of decorative lighting systems within the community: Residential/neighborhood, Pedestrian/trail, and Commercial Districts. This policy covers only those projects that provide lighting in public areas or within the public right-of-way that are accessible to the general public. Projects within private developments and/or on private property shall be privately designed, constructed, and owned. Light & Power shall meter and bill private development projects at Board approved tariff rates.

LIGHTING SPECIFICATIONS: The Department shall design, furnish, install, and own all equipment and infrastructure comprising the decorative lighting system. Specifications will be in compliance with City of Traverse City Master Plan Urban Design Element, along with City of Traverse City regulations for lighting levels, if any. Environmental concerns and energy use are some of the factors that will be considered to limit the amount of lighting. Lighting will be installed to Department specifications, which will be regularly updated as technologies advance.

MATERIALS/EQUIPMENT: Poles and fixtures used for decorative lighting must be approved for use by the Executive Director. Approval will be based on operation, maintenance, conservation, and cost criteria. There are 2 styles of decorative fixtures that are currently approved: the acorn and the candy cane. The acorn is used in both residential and commercial districts; while the candy cane is used in the commercial districts. Fixtures other than styles supported by the Department will require approval by the Executive Director and may subject the requestor(s) to reimbursing the utility for any additional costs, including the cost of maintaining an appropriate level of inventory for repairs and/or replacement equipment and fixtures.



Candy Cane



Acorn

INSTALLATION PROCESS: This section will address when Decorative Lighting Systems will be installed and/or upgraded, the end of the service life, cost of replacement, and the approval process.

- a) **Installation/Upgrades:** Every effort will be made to install and/or upgrade Decorative Lighting Systems in conjunction with the City's plans for street reconstruction. During the annual Capital Planning Process, it is requested that the City Manager provide a written request to the Department's Executive Director on any City projects that will or could require decorative lighting additions/replacements. Additionally, the Department shall notify the City Manager in writing of any systems that are scheduled for replacement well in advance for City Capital Planning purposes.

It is anticipated that the City and the Department will work together to minimize project costs and to reduce the inconvenience/disruption to residents, businesses and visitors.

The Light & Power Board retains the right to deny or delay participation in any project.

- b) **End of Service Life:** The lighting infrastructure that the Department installs is designed to last approximately 20 to 30 years. At some point the cost to maintain the system becomes more than its present value and/or safety concerns have resulted in the infrastructure reaching the end of its usable service life. The end of service life will be determined by the Department's Executive Director. The end of service life shall not occur before all street lighting assessments are paid in full. When the end of service life is reached the Department may schedule its replacement in its Six Year Capital Improvements Plan for approval by the Board and City Commission. Approval of the Plan will determine that the system will be replaced. If the project is not approved the system will be scheduled for removal.
- c) **Cost of Replacement:** The Decorative Lighting System shall be owned, operated and maintained by the Department. Replacement of the system shall occur as follows:

- The related underground systems will be replaced, as required, with the entire cost borne by the Department. The underground distribution system supporting the Decorative Lighting System becomes part of the Departments overall distribution system upon its installation, and it shall be maintained and replaced in the same manner as any other underground distribution system.
 - The above ground equipment/fixtures shall be replaced with the cost of the equipment/fixture paid by the benefiting party. This can be done through special assessments, Tax Increment Financing, bonds, City Capital Projects Fund, or any other funding mechanism that reimburses the utility for the cost of the replacement fixtures/equipment. Whatever form of reimbursement is used, including the timeframe for reimbursement to the utility will be presented to the Board at the time the Board considers approval of the purchase or replacement equipment/fixtures.
 - The Light & Power Board retains the right to self-fund any project it deems in the best interest of the City or Light & Power.
- d) Approval Process: Time permitting; all Decorative Lighting Projects shall be included in the Light & Power Six Year Capital Improvements Plan (the "Plan"). The Plan will have been approved by the Light & Power Board, City Planning Commission and City Commission.

Initiation of a Decorative Lighting Project can be from either the City, Downtown Development Authority, neighborhood organization, or other interested parties. With approval of the Executive Director, staff will prepare conceptual plans and cost estimates for inclusion in the Plan (the cost estimate will separate the cost of fixtures, underground infrastructure and installation charges.) If outside of the Plan timing process, these conceptual plan and cost estimates shall be forwarded to the Board for consideration of participation in the project, along with a recommendation from the Executive Director.

Upon Board approval of the Plan, staff (or other party if by agreement) shall commence with engineering, design, and preparation of bid packages in coordination with the City or other party(s) so that Light & Power staff is prepared to seek bids in a timely manner for the project. Actual bids shall be submitted to the Board for final approval, as required by the Purchasing Policy.

The Department reserves the right to delay approved decorative lighting projects due to other priorities, at the discretion of the Executive Director.

FUNDING: The cost of a Decorative Lighting Project includes fixtures, underground infrastructure, engineering, administration, design, installation, inspection, and final closeout. Generally, Light & Power's contribution to Decorative Lighting Projects will include the cost of underground infrastructure, engineering, administration, installation charges, inspections, and final closeout. The cost of fixtures, and their eventual replacement, shall be borne by the

requestor or benefiting party.

- a) Decorative Lighting with Street Reconstruction Projects: Decorative lighting will be installed as part of a street reconstruction project at the request of the City and as approved by the Board. Decorative light fixtures will be purchased and installed by Light & Power. The cost of the fixtures shall be reimbursed to Light & Power as approved by the Board. Funding may come from the City's Capital Improvements Fund, TIF Funds, Grants, special assessments, or other funds.
- b) Decorative Lighting Stand Alone Projects: Decorative lighting can be installed in advance of street reconstruction or along designated recreation/pedestrian trails in the public right-of-way. Decorative light fixtures will be purchased and installed by Light & Power. The cost of the fixtures shall be reimbursed to Light & Power as approved by the Board. Funding may come from the City's Capital Improvements Fund, TIF Funds, Grants, special assessments, or other funds.
- c) Operation and Maintenance Costs: Decorative lighting that has been installed in the public right-of-way and to Light & Power standards (lighting levels and equipment used) will be owned by the utility. The operation and maintenance costs for decorative lighting are borne by Light & Power in accordance with the City of Traverse City and Traverse City Light & Power Street Lighting Operations and Maintenance Policy adopted on June 22, 2010.

As in all lighting projects, Light & Power retains the right to self-fund projects it deems in the best interests of the city or Light & Power.

This policy supersedes and replaces the Decorative Street Lighting Policy adopted on November 13, 1990, and all other policies in conflict with this policy.

Timothy J. Arends

Timothy J. Arends,
Executive Director and Secretary
Traverse City Light and Power Board



TRAVERSE CITY
LIGHT & POWER

To: Light & Power Board
From: Karla Myers-Beman, Controller *KMB*
Date: September 6, 2016
Subject: Solar Analysis

Enclosed for your review, is the calculation of the avoided cost solar rate for the ten years based on the short run (market prices versus long run of constructing a new generation unit). Staff hopes that providing the perspective of the short and long run (presented at the February 2016 meeting and the presentation is included for your review) will be enough information for the Board to give an opinion on price guidelines to be used for negotiation in the potential upcoming purchase power agreement of a 1 MW solar generating unit.

The analysis used the actual hourly data from the Community Solar Project with Cherryland Electric Cooperative ("CEC") and then projected out using data from the National Renewable Energy Laboratory, a higher capacity generating unit of 12.4% versus CEC capacity of 10.9%. This was done to show the impact a higher generating unit would have on the kWh price.

Assumptions used in the analysis are as follows:

- The local marginal pricing (energy cost) is based on the latest market indices published for the future four years at the Indiana hub and use the latest basis information from prior transactions to move the pricing into Michigan. The hourly profile is taken from Ventyx data and beyond the four years it is assumed that the implied heat rate in the market is constant and move prices with the Henry Hub natural gas.
- Capacity prices based on projected market prices through 2018 with that price holding constant until 2024-25.
- Transmission costs projected based on past three years historical trends.
- Renewable Energy Credits holding the current value for the next ten years based on current legislation proposing the increase in percentage of renewable energy of the generation portfolio over the current mandate to be a goal versus increasing the current mandate.
- Solar degradation at .05% per year.
- Similar to the long run analysis this calculation does not include any health or environmental benefits relating to solar generation.

FOR THE LIGHT & POWER BOARD MEETING OF SEPTEMBER 13, 2016

The analysis shows the following:

- Solar becomes more valuable to the utility as the cost of energy, capacity and transmission increases.
- The higher generating unit provides more generation during peaking hours providing the increase in the value or price per kWh in energy and transmission costs, however, the higher generation provides the capacity costs to be spread among more kWh's causing a reduction in the price per kWh for capacity costs.
- In year 8 of the analysis the short run meets the long run price per kWh.

In summary, the long term calculated by Utility Financial Solutions was \$.0842 while the short term analysis provided a range starting from year 2, which is the expected year the generating unit will become operational of \$.0605 to \$.0895.

The generating unit is not directly tied to an entity that would be consuming the generation, (not a net metering scenario) therefore; the unit will be utilizing the Utility's distribution and substation and sub transmission system to distribute the electricity to the Utility's customers (these costs were avoided in the long run scenario). To compensate for the utilization of the distribution and substation and sub transmission system, staff reduced the long term rate to \$.079910 while compensating the rate for the value of renewable energy credits.

Staff proposes and is looking for concurrence from the Board to utilize \$.079910 to \$.0895 as a range for negotiation in the potential upcoming purchase power agreement.

Traverse City Light and Power
 Avoided Cost/Purchase Power Price - Solar
 September 2016

Year	1	2	3	4	5	6	7	8	9	10
10.9% Capacity	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Energy Cost	\$ 0.0317	\$ 0.0319	\$ 0.0351	\$ 0.0352	\$ 0.0356	\$ 0.0354	\$ 0.0368	\$ 0.0388	\$ 0.0406	\$ 0.0426
Capacity Cost	\$ 0.0126	\$ 0.0215	\$ 0.0215	\$ 0.0303	\$ 0.0379	\$ 0.0378	\$ 0.0379	\$ 0.0379	\$ 0.0379	\$ 0.0378
Transmission Cost	\$ 0.0078	\$ 0.0082	\$ 0.0083	\$ 0.0084	\$ 0.0084	\$ 0.0086	\$ 0.0086	\$ 0.0087	\$ 0.0088	\$ 0.0089
Renewable Energy Credits	\$ 0.0003	\$ 0.0003	\$ 0.0003	\$ 0.0003	\$ 0.0003	\$ 0.0003	\$ 0.0003	\$ 0.0003	\$ 0.0003	\$ 0.0003
Total (Cost per kWh)	\$ 0.0523	\$ 0.0618	\$ 0.0652	\$ 0.0741	\$ 0.0822	\$ 0.0820	\$ 0.0836	\$ 0.0856	\$ 0.0875	\$ 0.0895

12.4 % Capacity	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Energy Cost	\$ 0.0325	\$ 0.0326	\$ 0.0357	\$ 0.0358	\$ 0.0363	\$ 0.0366	\$ 0.0384	\$ 0.0403	\$ 0.0425	\$ 0.0445
Capacity Cost	\$ 0.0110	\$ 0.0188	\$ 0.0188	\$ 0.0265	\$ 0.0332	\$ 0.0331	\$ 0.0332	\$ 0.0332	\$ 0.0332	\$ 0.0331
Transmission Cost	\$ 0.0086	\$ 0.0091	\$ 0.0092	\$ 0.0093	\$ 0.0093	\$ 0.0094	\$ 0.0095	\$ 0.0096	\$ 0.0097	\$ 0.0098
Renewable Energy Credits	\$ 0.0003	\$ 0.0003	\$ 0.0003	\$ 0.0003	\$ 0.0003	\$ 0.0003	\$ 0.0003	\$ 0.0003	\$ 0.0003	\$ 0.0003
Total (Cost per kWh)	\$ 0.0522	\$ 0.0605	\$ 0.0637	\$ 0.0716	\$ 0.0788	\$ 0.0792	\$ 0.0810	\$ 0.0831	\$ 0.0854	\$ 0.0874

Solar Avoided Cost Study Traverse City



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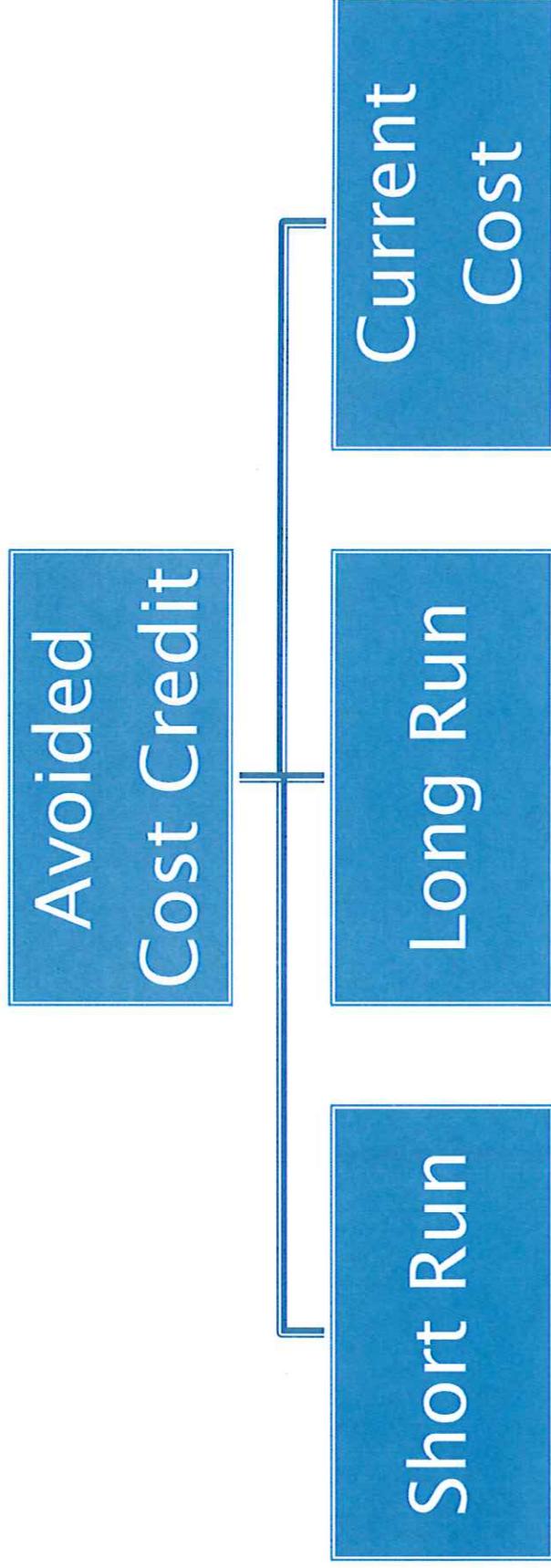
Review

- ▶ Traverse City recently retained Utility Financial Solutions to conduct studies on solar avoided cost, standby rate and revenue neutral rate design
- ▶ UFS completed an avoided cost determination for TCLP value of solar for residential to be .0808 cents per kWh and for commercial .0842 cents per kWh
- ▶ Using the prior TCLP cost of service study results, recent rate design updates and production profile for solar the long run avoided cost for Traverse City was determined



Determining the Value of Avoided Cost Credit

Three theories on how to value the avoided cost credit



Determination of Avoided Cost

Credit

Short Run

- ▶ When customer provides power supply to the utility the avoided cost in short run is the cost that is avoided
 - Market purchase of power
 - Fuel cost savings
 - Transmission savings
- ▶ Can vary substantially in any given year
- ▶ Inconsistent price signal to customer
- ▶ May not provide credit for capacity value of customers generation



Determination of Avoided Cost Credit Long Run

- ▶ Avoided costs are determined using a theoretical cost of avoiding construction of generation
 - Capital cost of avoided generation
 - Fuel cost savings
 - Transmission savings
 - Reserve requirement



Determination of Avoided Cost Credit Current Cost

- ▶ Avoided cost are determined using cost of service studies both demand and energy component for Power Supply
- ▶ Uses historical investment and average costs
- ▶ Gives customer credit for both capacity and fuel costs



Traverse City Used Long-Run Marginal Cost Savings and based

- ▶ Distribution lines
- ▶ Transformers
- ▶ Substations
- ▶ Sub transmission system
- ▶ System Losses
- ▶ Power Supply from TCLP
- ▶ Solar production data was derived from NREL (National Renewable Energy Laboratory) historical irradiance data
- ▶ Natural gas prices for next generating unit were derived from www.eia.gov (US Energy Information Administration)

Residential Savings

Solar - Residential											
Month	Production			Transmission			Substation and Distribution			Avoided	
	Capacity Savings	Transmission Savings	Energy Savings	Sub Transmission	Distribution Savings	Total Savings	Cost per kWh				
1	\$ 897.93	\$ 297.96	\$ 384.45	\$	\$ 175.43	\$ 16.70	\$ 0.1221				
2	\$ 744.78	\$ 245.86	\$ 732.32	\$	\$ 145.51	\$ 31.81	\$ 0.0687				
3	\$ 759.15	\$ 254.95	\$ 1,455.32	\$	\$ 148.32	\$ 63.21	\$ 0.0488				
4	\$ 1,850.42	\$ 632.68	\$ 1,930.28	\$	\$ 361.52	\$ 83.84	\$ 0.0667				
5	\$ 1,701.44	\$ 523.45	\$ 2,367.61	\$	\$ 332.42	\$ 102.84	\$ 0.0563				
6	\$ 3,272.67	\$ 1,041.07	\$ 2,363.19	\$	\$ 639.39	\$ 102.65	\$ 0.0832				
7	\$ 2,254.51	\$ 474.36	\$ 2,324.61	\$	\$ 440.47	\$ 100.97	\$ 0.0638				
8	\$ 5,505.45	\$ 1,116.44	\$ 2,060.19	\$	\$ 1,075.62	\$ 89.49	\$ 0.1266				
9	\$ 5,175.77	\$ 1,080.45	\$ 1,637.89	\$	\$ 1,011.21	\$ 71.14	\$ 0.1452				
10	\$ 869.93	\$ 296.95	\$ 1,177.76	\$	\$ 169.96	\$ 51.16	\$ 0.0577				
11	\$ 647.18	\$ 215.00	\$ 624.55	\$	\$ 126.44	\$ 27.13	\$ 0.0696				
12	\$ 266.45	\$ 90.83	\$ 343.26	\$	\$ 52.06	\$ 14.91	\$ 0.0592				
Total	\$ 23,945.68	\$ 6,270.02	\$ 17,401.42	\$ -	\$ 4,678.35	\$ 755.85	\$ 53,051.32	0.0808			



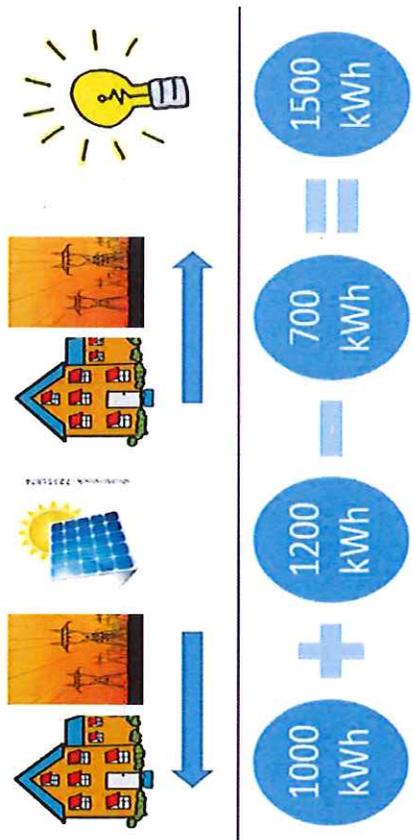
Commercial Savings

Solar - Commercial											
Month	Production			Transmission		Energy Savings		Substation and Distribution		Avoided Cost per kWh	
	Capacity Savings	Transmission Savings	Energy Savings	Sub Transmission	Distribution Savings	Total Savings	Sub Transmission	Distribution Savings	Total Savings	Cost per kWh	
1	\$ 897.93	\$ 297.96	\$ 384.45	\$ 175.43	\$ 66.62	\$ 1,822.41	\$ 175.43	\$ 66.62	\$ 1,822.41	\$0.1256	
2	\$ 744.78	\$ 245.86	\$ 732.32	\$ 145.51	\$ 126.90	1,995.37	\$ 145.51	\$ 126.90	1,995.37	0.0722	
3	\$ 759.15	\$ 254.95	\$ 1,455.32	\$ 148.32	\$ 252.19	2,869.92	\$ 148.32	\$ 252.19	2,869.92	0.0522	
4	\$ 1,850.42	\$ 632.68	\$ 1,930.28	\$ 361.52	\$ 334.49	5,109.38	\$ 361.52	\$ 334.49	5,109.38	0.0701	
5	\$ 1,701.44	\$ 523.45	\$ 2,367.61	\$ 332.42	\$ 410.27	5,335.19	\$ 332.42	\$ 410.27	5,335.19	0.0597	
6	\$ 3,272.67	\$ 1,041.07	\$ 2,363.19	\$ 639.39	\$ 409.50	7,725.82	\$ 639.39	\$ 409.50	7,725.82	0.0866	
7	\$ 2,254.51	\$ 474.36	\$ 2,324.61	\$ 440.47	\$ 402.82	5,896.76	\$ 440.47	\$ 402.82	5,896.76	0.0672	
8	\$ 5,505.45	\$ 1,116.44	\$ 2,060.19	\$ 1,075.62	\$ 357.00	10,114.70	\$ 1,075.62	\$ 357.00	10,114.70	0.1301	
9	\$ 5,175.77	\$ 1,080.45	\$ 1,637.89	\$ 1,011.21	\$ 283.82	9,189.15	\$ 1,011.21	\$ 283.82	9,189.15	0.1486	
10	\$ 869.93	\$ 296.95	\$ 1,177.76	\$ 169.96	\$ 204.09	2,718.70	\$ 169.96	\$ 204.09	2,718.70	0.0611	
11	\$ 647.18	\$ 215.00	\$ 624.55	\$ 126.44	\$ 108.22	1,721.39	\$ 126.44	\$ 108.22	1,721.39	0.0730	
12	\$ 266.45	\$ 90.83	\$ 343.26	\$ 52.06	\$ 59.48	812.08	\$ 52.06	\$ 59.48	812.08	0.0627	
Total	\$ 23,945.68	\$ 6,270.02	\$ 17,401.42	\$ -	\$ 3,015.41	\$ 55,310.88	\$ 4,678.35	\$ 3,015.41	\$ 55,310.88	0.0842	



Metering & Billing Method

Determine Customer Usage



- ▶ Customer billed on total facilities electric usage
- ▶ Utility credits customer on the total solar production
- ▶ Metering required:
 - Meter on solar unit
 - Meter on facility

Residential Option

Residential Charge per kW of Solar Installation	
Average Residential Rate	\$ 0.11025
Avoided Cost	0.0808
Lost Revenues per kWh	0.0295
Annual kWh production from 1 kW of Solar	1,095
Annual Under-Recovery from Solar	\$ 32.29
Additional Monthly Charge per kW of installed Solar	\$ 2.69

- ▶ Additional Charge per Month per installed kW. Example: 5 kW Solar unit would be Charged \$13.45(\$2.69 x 5)

