A REGULAR MEETING

Of The

TRAVERSE CITY LIGHT AND POWER BOARD

Will Be Held On

Tuesday, August 13, 2019

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

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

Posting Date: 8/9/2019 3:00 P.M.

AGENDA

Pledge of Allegiance

1. Roll Call

2. Disclosure of Recusal

3. Consent Calendar

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

- a. Approval of Agenda.
- b. Consideration of approving minutes of the Regular Meeting of July 9, 2019. (Approval Recommended (p.4)
- c. Consideration of approving amended Energy Services and Equipment Sale Policy. (Approval Recommended) (Dixon) (p.7)
- d. Consideration of approving a purchase order for electric meters. (Approval Recommended) (Menhart) (p.10)
- e. Consideration of approving a dollar amount increase in the tree trimming contract with Penn Line Services, Inc. (Approval Recommended) (Dixon) (p.15)

4. Unfinished Business

a. Consideration of approval of the Resolution of Intent to Establish Energy Financing, Work Plan Report titled *Report-On-Bill Financing Program* in accordance with Public Act 408, proposed ordinance and submission to the City Commission for approval. (Arends) (p.16)

5. New Business

a. None.

6. Reports and Communications

- a. From Legal Counsel.
- b. From Staff.
 - 1. Presentation on Renewable Energy Goals and Capacity Planning. (Arends/Dyer) (p.61)
 - 2. Presentation by Michigan Public Power Agency. (Arends/Bowland) (p.96)

- 3. Presentation by Michigan Municipal Electric Association. (Arends/Abraham) (p.113)
- 4. Capital Plan Update. (Arends/Dixon/Myers-Beman) (p.121)
- 5. HL-22 Distribution Circuit Rebuild and Critical & Large Customer #4 Project close-out reports. (Dixon/Myers-Beman) (p.123)
- 6. Update on electronic board packets. (Menhart-verbal)
- 7. Update on Fiber to the Premise Project. (Menhart-verbal)
- 8. Update on outage survey. (Schroeder-verbal)
- 9. Audit engagement letter and audit questionnaire. (Myers-Beman) (p.126)
- c. From Board.
 - 1. Discussion of proposed tree ordinance. (Taylor-verbal)

7. Public Comment

a. General.

/js

TRAVERSE CITY LIGHT AND POWER BOARD

Minutes of Regular Meeting Held at 5:15 p.m., Commission Chambers, Governmental Center Tuesday, July 9, 2019

Board Members -

Present:

John Taylor, Elysha Davila, Ross Hammersley, Pat McGuire, Amy

Shamroe, Tim Werner, Paul Heiberger

Absent:

Ex Officio Member -

Present:

Marty Colburn, City Manager

Others:

Tim Arends, W. Peter Doren (General Counsel), Daren Dixon, Scott

Menhart, Karla Myers-Beman, Kelli Schroeder, Tony Chartrand, Jacob

Hardy, Jennifer St. Amour

Item 2 on the Agenda being Disclosure of Recusal - None

Item 3 on the Agenda being Consent Calendar

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

- a. Approved the Agenda.
- b. Approved the minutes of the Regular Meeting of June 11, 2019.
- c. Approved the four-year contract extension with Smart Energy Systems for energy waste reduction software.
- d. Renewed a collection agency contract with Cadillac Accounts Receivable Management, Inc. for collection agency services.
- e. Appointed Karla Myers-Beman as Officer Delegate and Kelli Schroeder as Officer Alternate Delegate to cast official votes on behalf of TCL&P at the Annual Meeting of the Municipal Employees Retirement System.

CARRIED unanimously.

Items Removed from the Consent Calendar

None.

Item 4 on the Agenda being Unfinished Business

a. Consideration of an amended M-72 Power Purchase Agreement for Renewable Energy.

The following individuals addressed the Board:

Tim Arends, Executive Director Karla Myers-Beman, Controller

Moved by Hammersley, seconded by Shamroe, that the Light & Power Board authorizes the Chairman and Secretary to sign the second amended and restated Purchase Power agreement subject to review as to substance by the Executive Director and as to form by General Counsel.

CARRIED. 6 Yes Votes, 1 No vote – McGuire.

b. Consideration of approval of an amended Fiber Fund Budget and submission to the City Commission for approval.

The following individuals addressed the Board:

Tim Arends, Executive Director Karla Myers-Beman, Controller

Moved by Shamroe, seconded by Hammersley, that the Light & Power Board approves forwarding the 2019-20 amended Fiber Fund budget as presented to the City Commission for its consideration of approval.

CARRIED unanimously.

Item 5 on the Agenda being New Business

a. Consideration of authorizing a Resolution to Amend City Ordinance – Lien.

The following individuals addressed the Board:

Tim Arends, Executive Director W. Peter Doren, General Counsel Karla Myers-Beman, Controller

Moved by Heiberger, seconded by McGuire, that the Light & Power Board adopts the resolution to request the City Commission amend Section 1046 of the Traverse City Code of Ordinances.

CARRIED unanimously.

Item 6 on the Agenda being Reports and Communications

a. From Legal Counsel.

Mr. Doren stated that TCL&P was represented by different attorneys relating to TCLP categories. Karrie Zeits represents Pole Attachment Agreements, Jeff Jocks represents Fiber to the Premise, Mr. Doren represents all other. Mentioned Mike Borden is a Litigator.

- b. From Staff.
 - 1. Fiber to the Premise Project Update.

The following individuals addressed the Board:

Tim Arends, Executive Director Scott Menhart, Manager of Telecom & Technology Karla Myers-Beman, Controller W. Peter Doren, General Counsel

c. From Board

Item 7 on the Agenda being Public Comment

a. General

The following individuals from the Public addressed the Board:

None.

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

Tim Arends, Secretary
LIGHT AND POWER BOARD



To:

Light & Power Board

From:

Daren Dixon, Operations Manager

Date:

July 23, 2019

Subject:

Equipment Sales and Service Policy

Included in your packet for review is a revised Equipment Sales and Service Policy that clarifies the circumstances under which TCL&P may sell equipment or services on customer-owned facilities to commercial or industrial customers. The policy would limit it to unplanned, emergency situations where:

- Other providers are unable to do so in a timely manner
- Items are in stock and emergency stock is not eliminated
- TCL&P workers are qualified to perform the work and service to other customers is not affected

This item is on the Consent Calendar as it is deemed non-controversial. Approval of this item on the Consent Calendar means you agree with the motion provided below.

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

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

MOVED BY	, SECONDED BY	
1110 1	,0200102001	7

THAT THE BOARD ADOPTS THE AMENDED EQUIPMENT SALES AND SERVICES POLICY AS PRESENTED WITH AN IMMEDIATE EFFECTIVE DATE.

Light and Power Department City of Traverse City, MI

Adopted: June 27, 2000

Amended: September 10, 2002 Amended: August 13, 2019

ENERGY SERVICES AND-EQUIPMENT SALES AND SERVICES POLICY

- 1. <u>Purpose:</u> The purpose of this policy is to provide Traverse City Light and Power (<u>TCL&P</u>) commercial <u>or industrial</u> customers a <u>financing</u> mechanism for the <u>economical</u> acquisition of <u>energy services and replacement equipment materials or services</u> from <u>Traverse City Light and PowerTCL&P</u> for customer-owned equipment during emergencies.
- 2. Energy Services and EquipmentConditions: At its sole discretion, Traverse City Light and PowerTCL&P shall-may make available for purchase by commercial or industrial customers, on an as-needed basis, energy services and equipmentmaterials necessary to replace or repair customer-owned equipment under the following conditions:
 - a. The replacement or repair need is unplanned.
 - b. Other suppliers are unable to provide the equipment in a timeline that would prevent customer hardship due an inability to utilize TCL&P-provided electric service.
 - c. TCL&P must have the item in stock.
 - d. Sale of the item must not put the service reliability of other customers at extensive risk by eliminating the last of spare equipment.
 - e. Customer will be responsible for paying all sales tax and any fees associated with the purchase.
 - f. promote undergrounding and the conservation and economical delivery of energy. The rior to a transfer of ownership, the customer may purchase for eash or by installment must provide a purchase order or payment in full and return a signed Bill of Sale as prepared by TCL&P.
- 3. **Services:** TCL&P may assist commercial or industrial customers by providing services on customer-owned electrical equipment under the following conditions:
 - a. The need for the services is unplanned.
 - b. Required services are not available from other sources in a timeline that would prevent customer hardship due an inability to utilize TCL&P-provided electric service or that would eliminate immediate safety issues.
 - c. TCL&P employees have experience working with such equipment and are qualified to do so.
 - d. TCL&P can make resources available without creating delays in service restoration or construction hardships for other customers.
- 3. <u>Installments:</u> The commercial customer may choose to purchase such energy services and equipment on an installment sales basis. The following conditions shall apply to such sales:
 - (a) The maximum installment period is five (5) years.

- (b) Payments shall be made monthly in equal amounts with an annual interest rate equal to the current rate in effect for special assessments as established by the City.
- (c) In order to qualify for such installment purchase, the customer must be current in all bills and charges to Traverse City Light and Power and must agree to purchase all electrical energy and associated ancillary services from Traverse City Light and Power at the location where the services are to be performed or the equipment installed for a period equal to the installment purchase.
- 4. Security [DDI]: Traverse City Light and Power shall file a Uniform Commercial Code security interest covering the energy services or equipment purchased by installment.
- 5. <u>Maximum Total Installment Purchases:</u> The maximum outstanding installment amounts at one time issued under this policy shall not exceed \$150,000.

Frederick D. Nelson 7im Arends

Frederick D. Nelson Tim Arends, Secretary Traverse City Light and Power Board



To:

Traverse City Light and Power Board

From:

Scott Menhart - Chief Information Technology Officer

Meeting:

Regular Board - Aug 13 2019

Subject:

Electric Meter Procurement

Staff is near completion of installing all electric meter replacements in coordination with the Board approved Advanced Metering Infrastructure (AMI) project. Since this project was approved on the May 9, 2017 Board meeting, there have been a number of changes in customers, both commercial and residential, that are typical with ongoing business operations at TCL&P. This has resulted in the need for additional meters to fulfill ongoing business obligations as well has to have additional inventory on hand for new customers and/or meter replacements. As such, Staff has provided a quote in the amount of \$48,749.88 for electric meter procurement for the Board's consideration.

Staff recommends the Board approve the provided electric meter quote to support continued business operations.

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

If any member of the Board or the public wishes to discuss this matter, other than clarifying questions, it should be placed on the "items removed from the consent calendar" portion of the agenda for full discussion. If after the Board discussion you agree with staff's recommendation the following motion would be appropriate:

MOVED BY	, SECONDED BY	
THAT THE BOARD AUT	HORIZES PURCHASE ORDERS IN THE	TOTAL AMOUNT OF
\$48,749.88, MORE OR LE	SS, TO PROCURE ELECTRIC METERS	TO FULFILL ONGOING TCL&P
BUSINESS OPERATIONS		



Cannon Technologies, Inc. 3033 Campus Drive - Suite 350N Minneapolis, MN 55441 Phone: (763)-595-7777 Fax: (763)-543-7777

Sold-to address CITY OF TRAVERSE CITY 400 BOARDMAN AVENUE TRAVERSE CITY MI 49684-2595 US

Ship-to address TRAVERSE CITY LIGHT & POWER 1131 HASTINGS TRAVERSE CITY MI 49686-4318 US

Incoterms: Pre-Paid FOB PLANT Payment Terms: Net 30 Days

Customer Quotation

Page 1 of 4

Quotation Number Date 22270539 07/26/2019 Cust. purchase order no. 072519 RMF 2

Cust. no. 61297

Prepared By Rochelle Filiowich Validity period 07/26/2019 to 08/26/2019 Sales Representative 900007966 / DAN SCRIMA

Customer Service Contact ROCHELLE FILIOWICH 763-543-7796

THIS DOCUMENT INCORPORATES AND IS SUBJECT TO THE ATTACHED TERMS AND CONDITIONS.

ltem	Quantity	y UON	1 Description	Material No	Price	Ext. Value
Cust.	Cust.item Catalog Number					
	Cust	t.Materi	al Number			
30	125	EA 520-LGAX	RFN 500LG FOUCS AXSD 12S CL200 (12SD081D01 Commodity code 9028300000	120V Lbl 520-LGAX12SD08		27,750.00
40	12	EA NEW PRO	Lead Time is 14 Weeks, ARO RFN 500LG FOCUS AL 2S CL320 240\ DFILE REQUIRED			1,644.00
50	49	EA 430-ELA3	Lead Time is 16 Weeks, ARO (NEW PR RFN 430ELA3R 2S CL200 PQM Lbl S2SD781510 ZDC310000L1 PQM Commodity code 9028300000	OFILE REQURED) 430-ELA3S2SD78 49.000 Country of origin MX		15,680.00
70	8	EA 430-ELA3	Lead Time is 20 Weeks, ARO RFN 430ELA3R 12S CL320 PQM Lbl s12SD831510 ZD5410000L1 PQM Commodity code 9028300000	430-ELA312SD831		2,720.00
	uct Subto		Lead Time is 20 Weeks, ARO	2.000 %		47,794.00 955.88
	amount				105.0	48,749.88



Customer Quotation

Cannon Technologies, Inc. 3033 Campus Drive - Suite 350N Minneapolis, MN 55441 Phone: (763)-595-7777 Fax: (763)-543-7777

Quotation no./Date 22270539 / 07/26/2019

Sales Contact: JIM KHOURY / 2487984062

Page 2 of 4

Applicable Terms and Conditions

(a) These terms and conditions of sale establish the rights. obligations, and remedies of Buyer and Seller that apply to any order issued by Buyer for the purchase of Seller's products and/or services ("Products"). No additional or different terms or conditions, whether contained in Buyer's purchase order form or in any other document or communication pertaining to Buyer's order, will be binding on Seller unless accepted in writing by an authorized representative of Seller. Seller expressly objects to and rejects any additional or different terms and conditions, which shall be ineffective.

(b) If Seller's order acknowledgement, invoice, other document, or electronic transmittal including or attaching these terms and conditions is found to be an acceptance of an offer, acceptance is expressly made conditional upon Buyer's assent solely to these terms and conditions, and acceptance of any part of Products delivered by Seller shall be deemed to constitute such assent by Buyer. If the order acknowledgement, invoice, other document, or electronic transmittal including or attaching these terms and conditions constitutes an offer, Buyer's acceptance of the offer is hereby limited to the terms of the offer.

Price, Payment Terms, and Title

(a) All prices represent those in effect at the time of quotation and are subject to change without notice. Unless prices are bid or quoted as "firm," Seller reserves the right to invoice at prices in effect at the date of shipment, regardless of any prior bid and whether notice was received by Buyer. Unless otherwise indicated, prices are stated in United States dollars and are exclusive of shipping, handling, shipping insurance, duties, and sales, use, excise or similar taxes. Export packaging or any other special handling requested by Buyer will be at Buyer's expense. A service charge of \$25 will be assessed for any order less than \$250. Seller requires a minimum \$100 emergency handling charge for all orders that require shipment the same day

(b) Buyer acknowledges that the pricing of the Products has been set based on the agreed allocation of risks contained in these terms and conditions. If, notwithstanding the provisions of these terms and conditions, a court of competent jurisdiction determines that Buyer's terms and conditions apply to an order, then Seller shall have the right to either (i) modify the prices (including retroactively) according to the additional level of risk and responsibility that Buyer's terms and conditions require Seller to undertake; or (ii) cancel the order any time after such a determination without liability for the termination other than for the Products already delivered on these terms and

conditions.

(c) Unless different credit terms have been extended to Buyer in writing by Seller, payment terms are net 30 days after delivery or date of invoice, whichever first occurs, in the currency invoiced. Seller reserves the right to modify or withdraw credit terms at any time without notice. If Buyer fails to fulfill the terms of payment, Seller may defer further shipments to Buyer or, at its option, cancel the unshipped portions of Buyer's orders. Buyer agrees to pay interest on all past due invoices at the lesser of 18% per annum, compounded monthly, or the highest contractual rate allowable under the law.

(d) Until full payment of all obligations of the Buyer for an order, Seller reserves the title (but not the risk of loss) to all Products furnished under that order. If the Buyer defaults in payment or performance or becomes unar order. If the Buyer detaults in payment or performance or becomes subject to insolvency, receivership or bankruptcy proceedings or makes an assignment for the benefit of creditors, or without the consent of Seller voluntarily or involuntarily sells, transfers, leases or permits any lien or attachment on the Products, Seller may treat all amounts then or thereafter owing by Buyer to be immediately due and payable and Seller at its election may repossess Products for which Buyer has not paid in full. In the event of repossession of Products under this section or under the section entitled. repossession of Products under this section or under the section entitled "Security Interest," Buyer agrees that Seller may enter the premises where the Products may be located and remove them without notice and without being liable to Buyer for such repossession. Buyer will not set off invoiced amounts or any portion thereof against sums that are due or may become due from Seller, its parents, affiliates, or subsidiaries. Buyer grants Seller a security interest in Products for which title has passed to Buyer, products in which Products are incorporated, and Products that Seller sells (including all Products acquired hereafter from Seller, and all accessions, substitutions, replacements, and additions, and any proceeds from sale or disposition of Products), as security for performance by Buyer of all of its paymentobligations under these terms and conditions (including obligations regarding future advances). Buyer consents to Seller's execution of any documents to evidence and perfect this security interest, and agrees to execute the same if requested by Seller.

Delivery and Risk of Loss

(a) Unless otherwise agreed in writing, all deliveries of Products will be EXW (Incoterms 2000) Seller's facility. Products will be packed in Seller's standard commercial shipping packages. Charges for shipping may not reflect net transportation costs paid by Seller. Buyer shall reimburse Seller for all costs of storage and handling incurred by Seller after the date that Seller is prepared to make shipment.

(b) Delivery and shipping dates are approximate and represent Seller's best estimate of the time required to make delivery or shipment. Time is not of the essence with respect to the transactions covered by these terms and conditions, except with respect to Buyer's obligation to make all related

Seller's obligations under these terms and conditions will be dependent upon Seller's ability to obtain necessary raw materials and components. Seller shall have the right to make partial deliveries and to ship up to forty (40) days in advance of shipping date.

Acceptance

Acceptance shall occur, if not before, when Buyer fails to reject within ten (10) days after delivery of the Products. Buyer may rightfully reject only when a reasonable inspection shows that the Products fail to conform substantially to the specifications for the Products. Buyer waives any right to revoke acceptance. Buyer's remedies for any nonconformity detected after acceptance are limited to those expressly provided in these terms and conditions for breach of warranty.

Limited Warranty

(a) Seller warrants to each original Buyer of Products that Products are, at the time of delivery to the Buyer, in good working order and conform to Seller's official published specifications, provided that no warranty is made with respect to any Products, component parts, or accessories manufactured by others but supplied by Seller.

(b) Seller's obligation under this warranty for any Product proved not to be as warranted within the applicable warranty period is limited to, at its option, replacing the Product, refunding the purchase price of the Product, or using reasonable efforts to repair the Product during normal business hours at any authorized service facility of Seller. All costs of transportation of any Product claimed not to be as warranted and of any repaired or replacement

Product claimed not to be as warranted and of any repaired of replacement Product to or from such service facility shall be borne by Buyer.

(c) Seller may require the return of any Product claimed not to be as warranted to one of its facilities as designated by Seller, transportation prepaid by Buyer, to establish a claim under this warranty. The cost of labor for removing a Product and for installing a repaired or replacement Product shall be borne by Buyer. Replacement parts provided under the terms of this warranty are warranted for the remainder of the warranty period of the Products in which they are installed to the same extent as if such parts were original components. Warranty services provided under these terms and conditions do not assure uninterrupted operations of Products; Seller shall not be liable for damages caused by any delays involving warranty service.

(d) The warranty period for Products is the shorter of twelve (12) months from the date of installation or eighteen (18) months from the date of

shipment unless otherwise agreed by Seller in writing.

(e) EXCEPT FOR THE EXPRESS WARRANTY SET FORTH (e) EXCEPT FOR THE EXPRESS WARRANTY SET FORTH
ABOVE, SELLER PROVIDES PRODUCTS AS-IS AND MAKES NO OTHER
REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED,
STATUTORY OR OTHERWISE, REGARDING THE PRODUCTS, THEIR
FITNESS FOR ANY PARTICULAR PURPOSE, THEIR MERCHANTIBILITY,
THEIR QUALITY, THEIR NONINFRINGEMENT, OR OTHERWISE. IN NO
EVENT SHALL SELLER BE LIABLE FOR THE COST OF PROCUREMENT OR INSTALLATION OF SUBSTITUTE GOODS.

LIMITATION OF LIABILITY

IN NO EVENT WILL SELLER BE LIABLE FOR ANY SPECIAL CONSEQUENTIAL DAMAGES, INDIRECT DAMAGES DAMAGES. INCIDENTAL DAMAGES, STATUTORY DAMAGES, EXEMPLARY OR PUNITIVE DAMAGES, LOSS OF PROFITS, LOSS OF REVENUE, LIQUIDATED DAMAGES, OR LOSS OF USE, EVEN IF INFORMED OF THE LIQUIDATED DAMAGES, OR LOSS OF USE, EVEN IF INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. SELLER'S LIABILITY FOR DAMAGES ARISING OUT OF OR RELATED TO A PRODUCT SHALL IN NO CASE EXCEED THE PURCHASE PRICE OF THE PRODUCT FROM WHICH THE CLAIM ARISES. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THESE LIMITATIONS AND EXCLUSIONS WILL APPLY WHETHER SELLER'S LIABILITY ARISES OR RESULTS FROM BREACH OF CONTRACT, BREACH OF WARRANTY, TORT (INCLUDING BUT NOT LIMITED TO NEGLIGENCE, GROSS NEGLIGENCE, MALICE, OR INTENTIONAL CONDUCT), STRICT LIABILITY, BY OPERATION OF LAW, OR OTHERWISE OR OTHERWISE.

Cancellation and Return of Products

Orders shall not be subject to cancellation or modification either in whole or in part without Seller's written consent and then only with terms that will reimburse Seller for reasonable termination charges, including all progress billings and all incurred direct manufacturing costs. Seller's written consent must be given in advance of Buyer's return of Products for credit. Seller reserves the right to cancel any sale of Products without liability to Buyer (except for refund of monies already paid), if the manufacture or sale of the goods is or becomes technically or economically impractical.

Force Majeure

Seller shall not be liable for any failure to perform or delay in performing its obligations resulting directly or indirectly from or contributed to by any acts of God, acts of Buyer or those under Buyer's control, acts of government or other civil or military authorities, priorities, strikes, or other labor disputes, fires, accidents, floods, epidemics, war, riot, embargoes, delays in transportation, lack of or inability to obtain raw materials, components, labor, fuel or supplies, or other circumstances beyond Seller's reasonable control ("Force Majeure Event"). If Seller elects, the time for performance shall be extended by a period of time equal to the time lost because of any delays caused by reasons of a Force

Majeure Event. Should Seller be prevented from completing Buyer's order or any part thereof because of any Force Majeure Event, then Buyer agrees promptly upon request and upon receipt of invoice therefor, to pay Seller for any Product or Products then completed.

Work Product

Work Product" shall include, without limitation, all designs, discoveries, creations, works, devices, masks, models, work in progress, service deliverables, inventions, products, special tooling, computer programs, procedures, improvements, developments, drawings, notes, documents, business processes, information and materials made, conceived or developed by Seller alone or with others that result from or relate to the Products. All Work Product shall at all times be and remain the sole and exclusive property of Seller. Buyer hereby agrees to irrevocably assign and transfer to Seller and does hereby assign and transfer to Seller all of its worldwide right, title and interest in and to the Work Product including all associated intellectual property rights. Buyer hereby waives any and all moral and other rights in any Work Product or any other intellectual property created, developed or acquired in respect of the Products. Seller will have the sole right to determine the treatment of any Work Product, including the right to keep it as trade secret, execute and file patent applications on it, to use and disclose it without prior patent explications to file registrations for converget or trademark in its own patent application, to file registrations for copyright or trademark in its own name or to follow any other procedure that Seller deems appropriate. All tools and equipment supplied by Buyer to Seller shall remain the sole property of Seller.

10. Confidentiality

(a) Buyer may acquire knowledge of Seller Confidential Information (as defined below) in connection with Products and/or its performance hereunder and agrees to keep Seller Confidential Information in performance hereunder and agrees to keep Senial Confidential Information in confidence during and following termination or expiration of this Agreement. "Seller Confidential Information" includes but is not limited to all information, whether written or oral, in any form, including, without limitation, information relating to the research, development, products, methods of manufacture, trade secrets, business plans, customers, vendors, finances, personnel data, whether the product and other material or information considered proprietary by Work Product, and other material or information considered proprietary by Seller relating to the current or anticipated business or affairs of Seller that is disclosed directly or indirectly to Buyer. In addition, Seller Confidential Information means any third party's proprietary or confidential information disclosed to Buyer in the course of providing Products to Buyer.

(b) Buyer agrees not to copy, alter or directly or indirectly disclose any Seller Confidential Information. Additionally, Buyer agrees to limit its internal distribution of Seller Confidential Information to Buyer's employees who have a need to know, and to take steps to ensure that the dissemination is so limited. In no event will Buyer use less than the degree of care and means that it uses to protect its own information of like kind, but in any event not less than reasonable care to prevent the unauthorized use of Seller Confidential Information. Buyer may disclose Seller Confidential Information that is required to be disclosed pursuant to a requirement of a government agency or law but only after Buyer provides prompt notice to Seller of such requirement and gives Seller the opportunity to challenge or limit the scope of

(c) Buyer further agrees not to use Seller Confidential Information except in the course of performing hereunder and will not use such Seller Confidential Information for its own benefit or for the benefit of any third party. All Seller Confidential Information is and shall remain the property of Seller. Upon Seller's written request, Buyer shall return, transfer or assign to Seller all Seller Confidential Information, including all Work Product, and all copies containing Seller Confidential Information.

11.

Patent Indemnity. In the event any Product is made in accordance with drawings, samples or manufacturing specifications designated by Buyer, Buyer agrees to indemnify, defend, and hold Seller harmless from any and all damages, costs and expenses (including attorney's fees) relating to any claim arising from or relating to the design, distribution, manufacture, marketing, sale, or use of the Product or arising from or relating to a claim that such Product furnished to Buyer by Seller, or the use thereof, infringes any claim of any patent, foreign or domestic, and Buyer agrees at its own expense to undertake the defense of any suit against Seller brought upon such claim or claims.

Changes in Product Design or Manufacture

Seller shall have the right to change, discontinue or modify the design and construction of any of its products and to substitute material equal to or superior to that originally specified.

Software License 13.

Software, if included with a Product, is hereby licensed and not sold. The license is nonexclusive, and is limited to use with the Product with which it is included. No other use is permitted and Seller retains for itself (or, if applicable, its suppliers) all title and ownership to any software delivered hereunder, all of which contains confidential and proprietary information and which ownership includes without limitation all rights in patents, copyrights, trademarks and trade secrets. Buyer shall not attempt any sale, transfer, sublicense, reverse compilation or disassembly (save to the extent expressly permitted by law) or redistribution of the software. Buyer shall not copy, disclose or display any such software, or otherwise make it available to others.

Compliance with Laws

Buyer shall comply with all laws and regulations applicable to Products including all applicable import and export laws and regulations.Buyer and Buyer's Agent shall provide all information requested by Seller relating to Seller's voluntary or mandatory compliance with any law or regulation, and Buyer shall indemnify Seller for any losses incurred by Seller arising from Buyer's or Buyer's Agent's failure to provide the information requested by Seller.

Waiver 15.

No waiver of any provision of these terms and conditions (or any right or default hereunder) shall be effective unless in writing and signed by an authorized representative Seller. Any such waiver shall be effective only for the instance given, and shall not operate as a waiverwith respect to any other rights or obligations under these terms and conditions or applicable law in connection with any other instances or circumstances.

Language

The parties have expressly required that these terms and conditions beprepared in the English language. Les parties aux présentes ont expressément exigé que les présents termes et les bons de commandes émisaux termes des présentes soient rédigés en langue Anglaise.

Choice of Law and Dispute Resolution.

Except as set forth below, these terms and conditions shall be governed by and construed in accordance with the laws of the State of Texas, without reference to its choice of law rules. If both Seller andBuyer are incorporated under the laws of Canada or a province of Canada, these terms and conditions shall be governed by and construed in accordance with the laws of the Province of Ontario and the federal lawsof Canada. If Buyer is incorporated in the United States, any claim or litigation arising out of or relating to Products shall be brought exclusively in a court of competent jurisdiction in Harris County, Texas. If Buyer is incorporated outside of the United States, any dispute will be resolved by arbitration in Houston, Texas, by three arbitrators and under the International Chamber of Commerce Rules of Arbitration. The language of the arbitration will be English. In all cases, Buyer and Seller expressly exclude from application the United Nations Convention on Contracts for the International Sale of Goods.

18. Assignment

Buyer may not assign, transfer or subcontract the performance of its services, or any of its rights and/or obligations hereunder, without Seller's prior written consent.

Severability

If any provision of these terms and conditions is determined to be illegal, invalid, or unenforceable, the validity and enforceability of the remaining provisions of these terms and conditions will not be affected and, in lieu of such illegal, invalid, or unenforceable provision, there will be added, as part of these terms and conditions, one or more provisions as similar in terms as may be legal, valid and enforceable under applicable law. CPS 11012017



To:

Light & Power Board

From:

Daren Dixon August 8, 2019

Date: Subject:

Tree Trimming Contract Funds

On September 27, 2016 the Board approved a three-year contract ending October 11, 2019 for tree trimming services with Penn Line up to a value of \$563,409.60. This amount was predicated upon a 40 hour work week for one-two person crew for the duration of the contract. Due to emergent work outside of the normal circuit trimming and specialty work requiring more than the single two person crew over the three year period, it is projected that the spend will exceed the amount approved by the Board before the end of the contract. While halting tree trimming services for approximately five weeks would likely keep the spend on target, it would put the routine trimming behind schedule and would leave TCL&P somewhat vulnerable to emergency tree trimming needs. As the contract is a time and expenses contract and does not include the total amount, a change order is unnecessary.

Staff recommends that the Board approve a \$20,000.00 increase in tree trimming contract amount to a total spend of \$583,409.60 through the duration of the contract.

This item is on the Consent Calendar as it is deemed non-controversial. Approval of this item on the Consent Calendar means you agree with the motion provided below.

If any member of the Board or the public wishes to discuss this matter, other than clarifying questions, it should be placed on the "Items Removed from the Consent Calendar" portion of the agenda for full discussion. If after Board discussion you agree with staff's recommendation, the following motion would be appropriate:

MOVED BY_	-	, SECONDED BY	´

THAT THE BOARD APPROVE A \$20,000 INCREASE IN THE AMOUNT OF THE EXISTING TREE TRIMMING CONTRACT WITH PENN LINE SERVICES, INC. DATED OCTOBER 7, 2016 FOR A NEW TOTAL AMOUNT OF \$583,409.60.

FOR THE LIGHT & POWER BOARD MEETING OF AUGUST 13, 2019



To:

Light & Power Board

From:

Tim Arends, Executive Director

Date:

August 1, 2019

Subject:

On Bill Finance Program

Staff has been working with General Counsel, United States Department of Agriculture ("USDA") and Michigan Saves in moving forward with the On-bill Finance Program. Traverse City Light & Power ("TCL&P") has two sets of requirements to follow: the State of Michigan law for an on-bill finance program, which is Public Act 408 of 2014 ("PA 408"), and the application requirements of the USDA Rural Energy Savings Financing Program.

PA 408 requires TCL&P to submit for approval a resolution to the City Commission to establish a residential clean energy program, have the City Commission hold a public hearing on the proposed program, create a work plan report that details out information such as identification of an official authorized to enter into program contracts, the application process, eligibility requirements and et cetera. Included within your board packet for your review is the resolution and the work plan report titled, "Report – On-Bill Financing Program".

The USDA program requires a resolution to be approved by the City Commission supporting the approval of the On-bill Finance Program. However, General Counsel recommended staff propose an ordinance adoption to replace the resolution delegating authority to TCL&P and authorizing the Executive Director to execute the USDA documents. The USDA concurred with this recommendation, as TCL&P will have to be the borrower to comply with the Rural Energy Savings Program. Included within your board packet is the proposed ordinance.

Staff has met with City staff to received feedback on the proposed resolution and ordinance and to review the timeline of approvals.

Tentatively, staff will request the City Commission to place the resolution, introduce the ordinance and set a public hearing at a possible joint meeting between the two boards or at the next available regular City Commission meeting. At the following City Commission regular meeting, the public hearing will be held, and staff will request the City Commission enact the ordinance. If the ordinance is enacted, ten days later the ordinance will be in effect. After the ordinance is in effect, staff will submit the application and all required paperwork to the USDA. Meanwhile, staff will be working with Michigan Saves, who will assist with the administration of the program, and EFS, for loan underwriting services to finalize the details and contracts for Board approval in October.

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

FOR THE LIGHT & POWER BOARD MEETING OF AUGUST 13, 2019

MOVED BY _______, SECONDED BY _______, THAT THE LIGHT & POWER BOARD APPROVES FORWARDING THE RESOLUTION OF INTENT TO ESTABLISH CLEAN ENERGY FINANCING AND THE ACCOMPANYING REPORT – ON BILL FINANCING PROGRAM IN ACCORDANCE WITH PUBLIC ACT 408, ALONG WITH THE PROPOSED ORDINANCE, TO THE CITY COMMISSION FOR ITS CONSIDERATION OF APPROVAL.



TRAVERSE CITY LIGHT & POWER

Report On Bill Financing Program

August 13, 2019

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Document History

Version	Date	Nature of Revisions
1.0	August 13, 2019	Report On Bill Financing Program

This report is available on the Traverse City Light and Power's website (www.tclp.org) and for review at the office located at 1131 Hastings Street, Traverse City, MI 49686. Jacob Hardy, Energy Technician and Key Accounts Manager is the official authorized to enter contracts on behalf of Traverse City Light and Power under the 2014 Michigan Municipal Utility Residential Clean Energy Program Act. (PA 408).

Introduction

Purpose

This report outlines the details and requirements of the Traverse City Light and Power On-bill Financing Program, which provides easy, affordable loans to Traverse City homeowners for qualifying energy efficiency, and renewable energy improvements. Customers pay back the loan through a per-meter charge on their utility bill for electric services. The loan payment is considered part of the charges for electric services to the property. The report serves as a reference for anyone who wants to learn more about the On-bill Financing Program, including customers and contractors.

Why On-bill Programs?

Many homeowners lack the funds to make investments in clean energy improvements, especially for bigger ticket items that can produce the greatest savings. Higher up-front costs and a lack of easily accessible financing are commonly cited as key barriers to investments in residential energy efficiency, or renewable energy improvements. Rebate programs do not significantly lower this barrier. A residential energy efficiency upgrade that includes insulation; building envelope upgrades; and heating, ventilation, and air conditioning (HVAC) improvements will often cost thousands of dollars while installing a renewable energy system is even more costly. Access to financing is essential for reaching large numbers of homeowners and unlocking the many benefits of energy efficiency, and renewable energy.

Over the past several decades, a range of clean energy financing tools have been developed with the goal of reducing the up-front costs for clean energy improvements. An on-bill program is a common energy efficiency and renewable energy financing tool. As of 2015, 32 states have legislation related to on-bill programs or utilities that have implemented (or are currently developing) on-bill programs.

While existing options add diversity to the financing tools available, in each case there is something unique about on-bill programs that help fill a gap. For example, on-bill programs can do the following:

- 1. Expand access: Existing clean energy financing tools active in Michigan use traditional underwriting criteria and may not be available or attractive to all customers, such as those with tarnished credit. Those who don't qualify for these programs may qualify using utility repayment history.
- Provide greater affordability: On-bill programs typically allow for terms of up to 15 years (if non USDA funds are utilized), which make comprehensive energy efficiency, and renewable energy improvements more affordable for homeowners. Extended-term financing is beneficial for low- to moderate- and fixed-income individuals who need low, fixed monthly payments.
- 3. Provide solutions for tenants and other short-term occupants: On-bill programs can be structured to allow the debt obligation to be transferred to subsequent occupants. This is an enticing option for those who are interested in making improvements but expect to move soon.
- 4. Increase customer ease: In addition to high up-front costs for making energy improvements, lack of information and transaction costs can hold projects back. On-bill programs can address these barriers by integrating the improvement and payment process into customers' existing billing and customer services relationship with their energy provider.

Using this Program Implementation Report

This report is written in a conversational way, reflecting the way industry professionals refer to efficiency measures or efficiency programs. As a result, there are instances where terms are used interchangeably, such as "audit" and "assessment."

This report represents the best and most accurate information on Traverse City Light and Power's On-bill Financing Program as of the date on the front cover. A summary of changes to each version of this report is recorded after the table of contents.

Summary of the On-bill Financing Program

Program Overview

Under the Program, owners of residential buildings (four units or fewer), within the service territory of Traverse City Light and Power, can finance any eligible energy efficiency or renewable energy improvement. Eligible improvements include any measure or piece of equipment that has energy savings documented in the Michigan Energy Measures Database (MEMD)—such as air conditioners, air sealing, air source heat pumps, appliances, boilers, doors, furnaces, geothermal systems, insulation, roofs, skylights, water heaters, and windows; as well as renewable energy measures like solar photovoltaic (PV) systems and solar thermal systems. (See Appendix A for a sample list of eligible measures.)

Homeowners may also finance the remediation of pre-existing environmental hazards or the repair of physical and structural defects that create health and safety issues, so long as the remediation or repairs necessary to allow for an appropriate efficiency measure and the cause(s) of the environmental hazard or physical defect are addressed. All improvements must be implemented by an authorized contractor following the completion of a comprehensive, whole-home energy audit.

Loans under this program are secured loans for amounts of \$5,000-\$30,000 at a fixed-rate interest with terms of up to 120 months (10 years). (Details are provided in Table 1.)

Capital for the On-bill Financing Program is expected to be provided through the United States Development of Agriculture Rural Energy Savings Program Loan. Maximum amount requested will be \$250,000 per year. Up to a maximum \$100,000 of capital could come from internal funds based on approval of Traverse City Light and Power board on an annual basis. As required by the Rural Energy Savings Program Loan Fund Traverse City Light and Power will have a reserve cash amount for the outstanding loan amount designated as collateral. Traverse City Light and Power will be utilizing the ability to lien properties for any delinquent amount allowing for full collection of outstanding amounts due, therefore not requiring a debt reserve fund.

Table 1. Loan Product Details

Program Element	Definition	
Eligible properties	Single-family (one to four unit) homes within the service territory of a Traverse City Light and Power.	
Loan type	Unsecured loan.	
erecentence (* 10 de	Notice of the loan is recorded with the register of deeds for the county in which the property is located, allowing the loan obligation to stay with the property and become binding for future owners contracting electric service t the property.	
	Multiple loans per customer are allowed if the total amount financed does not exceed the maximum allowable loan amount (below). Multiple loans will be consolidated into one loan at the interest rate(s) in the effect at the time of issuing the additional loan.	
Repayment mechanism	Customers will pay back the loan through a per-meter charge on their monthly utility bill. The payment is considered part of the charges for electric services to the property. Traverse City Light and Power has the authority to disconnect the customer's utility service for nonpayment of the loan.	
Loan amounts \$5,000-\$30,000.		
Loan term	10 years or useful life of the improvement, whichever is less.	
Loan rates	Not to exceed prime plus 4 percent. Fixed rate with no prepayment penalty. Final APR is dependent on loan amount and length of loan.	
Key underwriting criteria	Twelve consecutive months of utility bill payments without any late charges. No delinquent taxes, bankruptcies, foreclosures, or repossessions greater than \$1,000 within the last three years (from discharge). No unsatisfied money judgement.	
_oan agreement	Loans are made directly by the authorized lender to the customer.	

Participant Roles and Responsibilities

Numerous organizations are involved in this program—from the program's marketing to the installation and financing of improvements and program monitoring. Roles of key entities, which are referenced in this report, are summarized in Table 2.

Table 2. Role and Responsibilities of Program Participants

Program Participant	Responsibilities
Program administrator	Recruit utility participants; arrange for loan origination and servicing; manage and oversee provider contracts (lender, originator, servicer, etc.).
	Research data needs and requirements; develop and/or coordinate the data exchange protocols.
	& Establish quality assurance criteria and procedures.
	8 Develop metrics and reporting requirements.
	Recruit, register, and oversee authorized installation contractors and energy auditors that provide services and promote financing under the program.
	Develop contractor training materials and conduct contractor training.
	Bevelop and implement an outreach plan and a branding/marketing strategy.
	& Create marketing collateral to be used by participating utilities and contractors.
	Bevelop and maintain systems for capturing project data.
	Conduct customer satisfaction surveys and quality assurance inspections.
	Monitor program results and impacts; create monthly and annual program performance reports.
Traverse City Light and Power	Work with capital provider, loan originator, and utility to develop underwriting criteria.
	Work with the capital provider and loan originator to develop the loan application.
	Promote loan program to customers and provide support (e.g. customer service, contractor outreach).
	6 Collect loan payments.
	Bill customers. Finalize program structure; create all program documents; and develop a program implementation report.
	6 Coordinate the legal review of program structure and documents.
	6 Coordinate Energy Saver rebate application.
	(The TCL&P rebate associated with the work pertaining to the loan application will be applied to loan)

Traverse City Light and Power	Provide loan capital.
(cont'd)	Pay installation contractor upon completion of work.
	Hold loan agreements with customers.
	Record notice of loan with register of deeds with county where
	property is located.
	Discharge loan from register of deeds upon notification of full repayment.
Loan originator	Accept loan applications from customers.
	Review underwriting criteria to determine loan eligibility.
	6 Create and distribute loan packet to customer.
	Provide signed loan packet to capital provider.
	Send new loan information to servicer.
	& Maintain license per federal and state laws; follow legal
	report lines in the lending and decision-making processes.
Loan servicer – Traverse City	Process loan payments.
Light and Power	Keep track of principal and interest paid.
	Monitor delinquencies.
	Notify utility of monthly loan payment amounts to be collected on utility bill.
	Notify customer, utility, and capital provider upon full repayment of loan.
Customer/homeowner	Select authorized contractor for energy audit and improvements; apply for loan.
Residential energy auditor	Conduct comprehensive whole-home energy assessments.
	Promote financing to customers.
Installation contractor	Install energy-saving or renewable energy improvements under contract with the customer.
	Promote financing to customers (can be the same company as energy auditor).

Lending Requirements

Overview of Lending Requirements

The authorized lender provides loans to customers whose residential property is located within the service area of Traverse City Light and Power. The loans comply with all applicable consumer lending laws. Customers will repay the loan monthly through a per-meter charge on their utility bill. The payment is considered part of the charges for electric services to the property. Consequences for nonpayment are the same as other utility service charges; the balance owed could be enforced in the same way that delinquency with utility service payments is handled.

Customer Eligibility

Eligibility requirements for the Traverse City Light and Power On-bill Financing Program include the following:

- Property must be located within the service area of Traverse City Light and Power.
- The customer must have at least 12 consecutive months of utility bill payments without any late charges.
- The name of the loan applicant must be the name on the utility account
- Applicant must meet underwriting criteria. (For details, see Table 1 above.)
- Applicant must complete a home energy audit. (See the Comprehensive Energy Assessment below.)
- Rental properties are eligible (single family; one to four units).
 - In Landlord/Tenant situations the Landlord must have the electric service in their name to be able to apply for the loan

Customers who qualify for free or lower-cost weatherization or retrofit programs are encouraged to take advantage of those programs before seeking loans through the program. Examples of such programs include the following:

- Weatherization Assistance Program: Administered by the state and local community action agencies.
- Michigan State Housing Development Authority Property Improvement Program.
- Utility income-qualified weatherization programs.
- U.S. Department of Agriculture loan and grant programs.
- Customers are encouraged to contact individual programs for detailed eligibility requirements and current program information.

Loan Application Process

We expect that many homeowners will learn about Traverse City Light and Power's On-bill Financing Program from contractors and outreach efforts of utility participants. In some cases, customers will seek authorized contractors via the Michigan Saves online searchable database. In other cases, contractors will promote their affiliation with the program through marketing materials. Regardless of the flow of contact between a customer and an authorized contractor, the enrollment process remains the same.

Step One: The customer identifies an authorized contractor to perform an energy assessment and identify potential energy improvements. (See the Eligible Improvements section below for details.) As part of the energy assessment, the contractor should perform "test-in" diagnostics, unless asbestos or other

hazardous materials are present in the home. The contractor should provide the customer with a detailed work plan and the cost for the proposed improvements.

Step Two: The contractor provides information about the on-bill loan program to the customer. If the customer would like to apply for the on-bill loan, the contractor initiates the loan application process for the customer by accessing the loan application center via phone or internet. The customer completes the loan application or sends a paper copy by mail. The loan application includes a consent form, which authorizes the release of the customer's utility bill payment history to loan application center. In most cases, the customer will receive a decision within minutes. The customer will be notified, in writing, if their loan application is approved, conditionally approved, or denied. If the loan application is conditionally approved, the customer will be asked to provide additional documentation to complete the application process. (See Appendix B for a sample loan application.)

Step Three: If a customer's loan application has been approved, and they wish to move forward with the on-bill loan, the customer should sign the contractor's agreement, the loan documents, and schedule the project through their contractor.

Step Four: The contractor installs the equipment according to the work plan and the contract with the customer. A "test out" procedure, such as a blower door test, may also be conducted to ensure that the improvements were installed properly. As necessary, the work plan could be modified to add or subtract energy efficiency, renewable energy, or nonenergy building performance improvements. If a change in the work plan caused the cost of the project to increase or decrease, the customer will have to sign new loan documentation that reflects the new project cost.

Step Five: After installation and the test-out procedure (as applicable), the contractor obtains the customer's signature on a certificate of completion (COC) and sends the COC to the lender. Once this is received an on-site audit may be performed to ensure the work plan was followed and the job is complete. This triggers payment to the contractor. (See Loan Closing and Servicing section below for more detail.) Payments are made directly to the contractors, minus an administrative fee, and normally arrive within seven to ten days.

Step Six: The contractor logs into their account, created when the contractor became authorized to participate in the on-bill loan program, and creates a new specification sheet (also called spec sheet or project record). The contractor attaches the signed COC and other project documentation, such as the detailed work plan, energy assessment report, and cost-benefit analysis, to this spec sheet. Once the spec sheet is complete, the contractor submits it to the program administrator so that quality assurance procedures can be implemented and energy savings calculated.

Step Seven: The customer repays the loan via direct billing by the participating utility on their monthly utility bill.

Loan Origination

The loan originator performs the following functions:

- Verifies that the contractor initiating the loan application and performing the work is authorized by the program administrator.
- Obtains consent from the applicant to pull credit history (according to underwriting criteria) and determines eligibility for loan.
- Obtains consent from the applicant for lender, contractor, and Traverse City Light and Power to disclose customer- specific information about the improvements made, financing provided, and pre- and postinstallation energy savings to the program administrator.
- Confirms compliance with program requirements.
- Communicates loan approval immediately (within minutes) upon receiving the loan application submission via web or phone.
- Facilitates the fulfillment of the loan requirements of the lender, including customer enrollment and generating loan agreements. (See Appendix C for sample loan agreement.)

Some of the sales that will be financed through the program will have been initiated by a contractor and, therefore, will be subject to the Michigan Home Solicitation Act. For these sales, the customer has a right to cancel any time prior to midnight of the third business day after the date of the sale. The loans are also subject to the Michigan Home Improvement Finance Act, which gives the customer the right to rescind the loan agreement no later than 5 PM on the business day following the date thereof.

Loan Closing and Servicing

The authorized lender will comply with all consumer lending laws. Once loan origination is complete, the customer will sign the loan documents. If the scope of work changes after the loan documents are signed, but before project completion, the contractor will prepare a change order with the revised project cost and submit to the lender. The customer would then sign revised loan documents.

Payment to the contractor will not occur until the work is completed and the borrower has signed a COC, created a spec sheet, and uploaded all supporting project documentation. Traverse City Light and Power reserves the right to periodically inspect work upon completion. This COC certifies that the borrower is satisfied with the completed work and consents to share certain information with the program administrator. The contractor will submit the signed COC to the program administrator, who will transmit it to TCL&P, thereby affirming project completion and triggering payment to the contractor.

Traverse City Light and Power will begin billing the customer on the customer's utility bill after the loan is closed in accordance with their established billing practices. Customers can make extra payment on the loan or pay off the loan early, without penalty, if they choose. Extra payments or payoffs should be sent directly to the lender.

Consequence for nonpayment will be the same as for other utility service charges: service can be shutoff for nonpayment, according to the terms of the participating utility's shut-off policy. Also unpaid loan accounts can be collected just like delinquent tax payments.

Notice of the loan will be recorded with the register of deeds for the county in which the property is located, and the obligation to pay the loan payment will stay with the property and be binding on future owners of the property. (See Appendix C for details.) When the property is sold (or rented), the property owner must disclose the loan to the prospective buyer or renter.

Fees

To maintain and monitor the network of contractors promoting the financing, the program administrator assesses authorized contractors a fee of 1.99% of the loan value upon loan closing. TCL&P withholds the 1.99% fee from the checks sent to contractors. TCL&P sends the fees to the program administrator monthly, along with a report that summarizes loan activity. The contractor agrees to the 1.99 percent fee when they join the on-bill loan program and sign the contractor agreement.

Eligible Improvements

Financing may only be used for qualifying energy efficiency, renewable energy, or nonenergy building performance improvements installed by authorized contractors. Measures installed by the homeowner—or by any other individual or company not authorized (or not acting as a sub-contractor for an authorized contractor)—are not eligible for financing. Additionally, improvements must save energy (no cosmetic improvements), unless the improvements are nonenergy building performance improvements related to energy efficiency, or renewable energy installations. A comprehensive energy assessment is required on every project. Due to this requirement, emergency equipment replacements are not eligible.

Comprehensive Energy Assessment

A comprehensive home energy audit (or assessment) by a certified home energy auditor must be completed before the customer applies for financing. A home energy audit is an evaluation of the energy performance of a residential structure—conducted by a qualified person using building performance diagnostic equipment and complying with American National Standards Institute approved home energy audit standards. The audit must meet both of the following requirements:

- I. Determines how best to optimize energy performance while maintaining or improving human comfort, health, and safety, as well as the durability of the structure.
- II. Includes a baseline energy model and cost-benefit analysis for recommending energy efficiency improvements.

With a comprehensive home energy assessment, homeowners are encouraged to implement multiple measures. Whenever recommended by the assessment, health and safety measures must be implemented for the project to be eligible for financing. Contractors must follow Section 802 of the Residential Energy Services Network standard for blower door test procedures when suspected asbestos or other hazardous materials are present.

Energy assessments must be conducted no more than 12 months prior to the loan application.

Customers can pay for the energy assessment up front or roll the cost into their loan. If a homeowner does not implement any improvement identified by the energy assessment, or is not approved for financing, the homeowner must pay the full cost of the energy assessment.

Eligible Measures List

Homeowners can finance any eligible energy efficiency, renewable energy, or nonenergy building performance improvement that is implemented by an authorized contractor. Eligible improvements include any measure or piece of equipment that has energy savings documented in the MEMD—air conditioners, air sealing, air source heat pumps, appliances, boilers, doors, furnaces, geothermal systems, insulation, roofs, skylights, water heaters, and windows; as well as renewable energy measures like solar PV systems and solar thermal systems. (See Appendix A for a sample list of eligible measures.)

The on-bill loan program also allows customers to finance the remediation of pre-existing environmental hazards or the repair of physical/structural defects that create health and safety issues (collectively known as nonenergy building performance improvements). The customer may only finance nonenergy building performance improvements if they are coupled with an appropriate efficiency measure, and if the cause(s) of the environmental hazard or physical defect are addressed. (See Nonenergy Building Performance Improvements below).

All appliances and other replaced equipment must be disabled and taken out of service permanently and must be either recycled or disposed of in accordance with local, state, and federal laws, codes, and ordinances. Appliances and other replaced equipment may not be re-used.

All work must be performed in accordance with all applicable federal, state, and local codes and standards, and contractors must obtain all required permits from local authorities.

Renewable Energy Improvements

Homeowners can use the on-bill financing program for renewable energy measures like solar PV systems and solar thermal systems. For all solar PV system installations, authorized contractors must also obtain appropriate city or municipal building permits. All solar PV installations must include a solar generation meter and meter enclosure. The solar PV system must comply with current Michigan Utility Generator Interconnection Requirements. Contractors must provide a copy of the interconnection agreement or of the authorization letter with the COC.

Solar PV systems must comply with the Traverse City Light and Power's net metering interconnection policies. TCL&P has the right to prohibit renewable energy installations. Customers should check with Traverse City Light and Power before starting any renewable energy project.

Residential wind turbines are not eligible for financing.

Nonenergy Building Performance Improvements

The on-bill financing program also allows customers to finance the remediation of preexisting environmental hazards or the repair of physical/structural defects that create health and safety issues. The customer may only finance nonenergy building performance improvements if the improvements are coupled with an appropriate efficiency measure, and if the cause(s) of the environmental hazard or physical defect are addressed. Examples of this type of work include but are not limited to the following:

- Asbestos abatement with air sealing or when installing a new boiler system.
- Electric service upgrade, necessary when installing a new heating/cooling unit.
- Opprade of knob and tube wiring to install insulation.
- Radon and lead abatement work.
- The cost of removing an oil tank when done with a heating system replacement.

Repairs to the home due to water damage, molds or mildew, ice dams, or other symptoms of poor building performance if the cause(s) of building performance-related damage are addressed.

In each of these examples, the remediation of the environmental hazard is necessary to allow for the installation of an efficiency measure. Customers cannot finance the remediation work on their own. A customer must also install a related efficiency measure.

Any remediation work must be performed by a contractor who is qualified, and in many cases, licensed for the task. Contractors should not attempt to remediate environmental hazards or correct physical defects they are not trained or qualified to repair. Doing so will increase contractors' liability and jeopardize their participation in the program. Authorized contractors who can remediate environmental hazards should consider obtaining pollution occurrence (also called pollution liability) insurance to protect them from liability.

Authorized Contractors

All energy-saving, or renewable energy improvements that qualify for financing must be installed by an authorized contractor (i.e., energy auditors and contractors installing qualifying improvements to homes). The program administrator authorizes and manages the contractors. To be authorized, the contractor must meet certain minimum requirements, including appropriate insurance, licensure, and program training. (See Table 3 below for details.) These requirements are reflected in the contractor application that must be completed by the contractor to become an authorized contractor. Authorized contractors can implement any energy efficiency measure on the eligible measures list. (See Appendix A for details.) In all cases, a baseline home energy audit must be conducted before an energy project is undertaken. (See details about requirements for the audit in the Comprehensive Energy Assessment above.)

Table 3. Contractor Qualifications

Category	Description	Documentation Required
Business Organizatio	on, Financial/Ethical Stability	
Licensed business	The company is registered with the Corporations Division at the State of Michigan	License number and business type (LLC, corporation, etc.) on application form
Workers' compensation or self-insurance	Required for all contractors unless they are a sole proprietor or limited partnership, which are exempt under state law, or a corporation or a limited liability company that has filed for an exclusion	Insurance certificate, proof of sole-proprietorship, or state exclusion form
General liability	Required with minimum coverage of \$1,000,000 per occurrence, \$1,000,000 aggregate	Insurance certificate
Add as certificate holder License/Certification	Contractors must add Traverse City Light and Power as a certificate holder to their certificate of insurance	Insurance certificate with Traverse City Light and Power shown as a certificate holder
Skilled trade license	Active license in applicable trade (see Table 3), as required by law with no pending actions against the license	Copy of license and confirmation of no pending action on application form
Federal lead-safe certification*	Required for any contractor with a residential builders or maintenance and alterations license (strongly suggested, but optional, for all other contractors)	Proof of successful completion
Training/Education Michigan Saves training	Training session on Michigan Saves program requirements and financing (offered online or via video)	Proof of participation

^{*} As of April 22, 2010, the U.S. Environmental Protection Agency (EPA) requires that contractors performing renovation, repair, and painting projects that disturb lead-based paint in homes, child care facilities, and schools must be certified and follow specific work practices to prevent lead contamination if the structure was built before 1978. Firms can become certified by completing an application and sending in a fee payment. Applications may take up to 90 days to be approved by the EPA. Individual renovation contractors must complete an EPA-accredited training course to receive certification. More information is available at http://www.epa.gov.

Any installation contractor performing work in a trade that requires a state license must have a valid license specific to that trade. The relevant state licenses are listed in Table 4.

Table 4. Summary of State Licensing Requirements for Contractors

Skilled Trade	License	Special Designations
Boiler	Boiler installer	None
Construction, including insulation, remodeling, and weatherization	Residential builders	None
Electrical	Electrical contractor or master electrician	None
Mechanical	Mechanical contractor	 Hydronic heating, cooling, and process piping Heating, ventilation, and air conditioning (HVAC) equipment† Ductwork Refrigeration Limited heating service† Unlimited heating service Limited refrigeration and air conditioning service† Unlimited refrigeration and air conditioning service N/A for program Specialty License A—Solar
Plumbing	Plumbing contractor or master plumber	None
Solar photovoltaic	Master electrician or electrical contractors license, and residential builders license	None

†Minimum requirement for mechanical contractor license. Strongly suggest classification numbers one (hydronic heating, cooling, and process piping) and three (ductwork), but they are not required. The Michigan mechanical code requires mechanical contractors to hold the service classifications (numbers five or six and seven or eight) if the contractor is servicing HVAC equipment. Classification number two (HVAC equipment) is for installation work only and is not a substitute for the service classifications.

Because of the complex nature of solar PV systems, the program has additional requirements for solar PV installation contractors. These additional requirements reflect the program administrator's desire that only experienced contractors install these systems.

Contractors must provide documentation that they meet the following minimum requirements:

Master Electricians license or Electrical Contractors license and a Residential Builders license

If a contractor does not hold the appropriate licenses, they should provide a copy of their sub-contractor's license.

Contractors should also meet one of the following requirements:

- North American Board of Certified Energy Practitioners (NABCEP) Solar PV Installer Certification; or
- MABCEP Solar PV Entry Level Program and two installations totaling 1 kWDC with at least 1 solar PV system that include an inverter and is subject to a complete electrical permitting and inspection process by local authorities. The contractor must have served as foreman, site supervisor, or site manager responsible for the quality of the installation—for both installations; or
- Installations of at least four solar PV systems with three that include an inverter and are subject to a complete electrical permitting and inspection process by local authorities. The contractor must have served as foreman, site supervisor, or site manager responsible for the quality of the installation for at least three of the installations.

Contractor Training

Authorized contractors must participate in training before performing any work under the on-bill financing program. At least one designated employee for each contractor must attend the training. That individual will serve as the contractor's point person to train other employees. While they are not required to do so, other employees having direct contact with customers, particularly those promoting the on-bill loan program, are strongly encouraged to attend the training.

The program training covers the following topics:

- Role of authorized contractors in the program
- Program guidelines, including eligible improvements
- Customer eligibility and enrollment process
- Use of forms
- Marketing and communications guidelines
- Quality assurance process

Administrative Fees Assessed to Contractors

Authorized contractors shall pay to the program administrator a fee of 1.99% of the loan amount for work completed under the program. The proceeds from collected fees are used by the program administrator to sustain the program's operations. The fee will be deducted from the amount sent by the lender to the contractor.

Billing and Payment

Contractor Payment

After the work is satisfactorily completed, the customer and contractor will sign a COC. The contractor is responsible for submitting this form, the spec sheet, and all supporting documentation to the program administrator. Once the COC is received, the lender will pay the contractor. The contractor will be paid within seven days of receipt of the signed COC.

Customer Rebates

The on-bill loan program is designed to complement utility rebates, state rebates, contractor incentives, and federal tax credits. For rebates offered by the State of Michigan, Traverse City Light and Power or DTE, the customer should follow the redemption procedures outlined by those entities. While the contractor can help the customer complete the redemption form, the customer is responsible for submitting the rebate form. The customer is also responsible for claiming any applicable federal tax rebates. The contractor will provide all the necessary product information and costs for customers to include in their tax filing.

Because rebate amounts and availability can change quickly and without notice, the program administrator strongly suggests that contractors and customers contact the utility directly for up-to-date information prior to installing any efficiency measure. The program administrator has no control or influence over any rebate program and makes no assurances or guarantees as to rebate amounts or availability. The rebate applied for through Traverse City Light and Power will be applied towards the loan. This only applies to the rebate pertaining to the energy saving measure(s) on the work plan associated with the loan.

The program does not currently provide for a contractor buy-down of the interest rate on a loan. However, contractors may apply other types of incentives before or after the loan is finalized (rebates, cash back, etc.). The contractor shall report any incentives accepted by the customer on the *spec sheet*.

Customer Inquiries

Customer inquiries regarding loan-related questions should be directed to the lender. Customers should direct any billing questions to Traverse City Light and Power. Customer complaints regarding services, equipment, or authorized contractors should be directed to the program administrator.

The program administrator oversees all aspects of the on-bill loan program, including program participants, processes, and external communications. In this role, the program administrator reviews certain credentials of the contractors. However, the program administrator does not "certify," "approve," or "qualify" contractors. The program administrator cannot endorse or make any warranties as to the work or business practices of a contractor. The program administrator encourages each customer to research the contractor's work through word of mouth, contractor ratings, customer networks (such as Angie's List), and the Better Business Bureau.

If a customer makes a complaint with the program administrator regarding a contractor's performance, workmanship, or professionalism, the program administrator will note the complaint in the contractor's permanent file and take appropriate action. Repeated customer complaints can result in a contractor's suspension or termination from the program.

Quality Assurance

Contractors promoting financing must provide high-quality work and comply with the requirements outlined in this report. The program administrator will perform certain quality assurance (QA) functions to confirm that—on a consistent basis—the financed measures qualify under program guidelines and were installed in accordance with applicable program requirements and industry standards, ensuring that energy savings can reasonably be achieved.

Quality Assurance Objectives

The QA objectives are to:

- Clearly define and educate contractors on the program requirements and institute processes and systems to avoid problems where possible and to proactively identify potential issues
- · Verify that financed measures are qualifying improvements under program guidelines
- Verify that the contractor followed Traverse City Light and Power program guidelines in performing the work and related paperwork requirements
- · Verify that there were no fraudulent or misleading actions on the part of the contractor or auditor
- Confirm customer satisfaction with contractor's performance and quality of work
- Provide a process for evaluation of contractor performance and workmanship and the resolution of identified problems

Quality Assurance Procedures

The QA procedures for overall program compliance and installation of measures are summarized in Table 6. These procedures combine contractor training and feedback through traditional oversight, while also providing a high level of assurance for homeowners that measures were installed correctly, a check for fraudulent activity, and continual improvement from contractors.

The QA procedures generally follow the Home Performance with ENERGY STAR® (HPwES) model, including document reviews, file checks, and site inspections. Michigan Saves will coordinate with any HPwES program in the state, such as the Consumers Energy program, to use that program's QA in lieu of most of these procedures. In addition, to avoid duplication, Michigan Saves will coordinate with third-party accreditation programs on QA activities for contractors participating in the Michigan Saves program.

Table 5. Summary of Quality Assurance Procedures

QA Measure	Purpose
Document review	Review COC for signatures and specification sheet for compliance with program guidelines
Customer satisfaction survey	Confirm contractor work quality and customer satisfaction with overall program—screen for site inspection
Phone call to customer	Verify customer satisfaction—screen for site inspection
Site inspections (periodic)	Verify accurate reporting and appropriate installation of measures

Document Review

After the COC and the specification sheet are uploaded to Michigan Saves through the OCP, Michigan Saves reviews the documents for accuracy and completeness. If the documents are not complete, Michigan Saves sends an email to the contractor asking for the missing information. If the missing information is not provided within two weeks, Michigan Saves will call or send a second email request and give the contractor another two weeks to provide the missing information. If the contractor does not respond, then Michigan Saves may issue a corrective action report (CAR) to the contractor.

Customer Satisfaction Survey

Michigan Saves sends a customer satisfaction email survey to each customer following the completion of the project. Customers rate their experience with Michigan Saves and the authorized contractor. All customers are given the opportunity to provide feedback, and all feedback that is received is anonymized, recorded, and made available in the "rating" column of the contractor search result. Michigan Saves will not provide names or contact information for any customer that submits feedback. Concerns with any customer comments or ratings should be submitted to Michigan Saves staff.

Phone and Site Inspections

After Michigan Saves reviews the documents for completion and accuracy, a certain percentage of projects will be selected for further review. Projects with unusual diagnostic test results or potential discrepancies will be flagged for site inspection. If additional projects need to be inspected to meet the minimum level of site inspections, projects will be selected at random

Phone or site inspections will occur on two of the contractor's first ten projects, and then 5 percent of projects thereafter. Initially, Michigan Saves staff will call the customer to confirm their satisfaction with the work and ask if they would like an onsite visit by staff. Michigan Saves staff will coordinate the site inspection directly with the homeowner.

Michigan Saves staff may request additional documentation in advance of a site inspection. This may include documentation of efficiency or equipment sizing, such as Manual J calculations, manufacturer documents, project invoice, or the start-up manual used to calibrate a furnace. Contractors must have these documents on file and supply them within ten days of the request.

During a site inspection, Michigan Saves staff will perform the following tasks:

- Visually, and through conversation with homeowner, verify basic information about the home and the installed equipment
- Visually confirm that all work identified in work scope has been completed
- · Verify that installation of equipment or materials is satisfactory:
 - Confirm reported efficiency rating of installed equipment, where applicable (evidence of window efficiency must be available at the home for purchase verification or available upon request)
 - Verify that furnace was calibrated appropriately (manufacturer's start up sheet has been completed and left with the homeowner or is available from contractor upon request)
- · Verify that no unsafe conditions from installed work exist
- · Verify that permits were pulled, if applicable

For air sealing and insulation projects with diagnostic testing, Michigan Saves staff will perform the following tasks:

- Visually, and through conversation with homeowner, verify basic information about the home and the installed equipment
- · Confirm if the homeowner received an audit report (visually inspect if possible)
- Visually confirm that all work identified in work scope has been completed
- Verify that installation of equipment or materials is satisfactory:
 - Confirm reported efficiency rating of installed equipment, where applicable (evidence of window efficiency must be available at the home for purchase verification or available upon request)
 - Verify that furnace was calibrated appropriately by reviewing the manufacturer's start up sheet, when available
 - Visually inspect attic insulation to confirm pre- and post- R value of insulation
 - Inspect other insulation
- · Verify that no unsafe conditions from installed work exist
- · Verify the blower door test-out results
- Verify that there is no obvious failure to comply with applicable laws, codes, and ordinances, such
 as providing R value and material for insulation to occupant

Types of Deficiencies and Corrective Action Reports

All deficiencies identified during quality assurance reviews and inspections will be categorized as safety, workmanship, or programmatic findings based on the guideline provided below. All deficiencies will require a corrective action, as indicated on the CAR.

Any repeated deficiencies will be cause for evaluation of contractor program status or dismissal from the program. If objective evidence is not supplied indicating that corrective actions have been addressed, including pictures or other such evidence, Michigan Saves may require an additional field inspection to verify the completion of the corrective action.

Safety Deficiencies

Safety deficiencies detected during site inspections must be addressed by the contractor within 48 hours of receipt of the CAR, because there is an immediate health and safety risk to the homeowner.

Safety deficiencies may include:

- · Electric, fire, or structural hazards to occupant that were part of installation
- Failed combustion safety testing results
- Gas leaks
- Improper clearance to combustibles that were part of installation
- Improper pipe wrap installation that creates a combustion hazard
- · Serious moisture issues that were not corrected by the installed measures
- Unsafe conditions from installed work that are an immediate risk to occupants
- Violation of the Building Airflow Standard
- · Other issues as defined by Michigan Saves staff during the site inspection

Workmanship Deficiencies

Workmanship deficiencies detected during inspections must be addressed by the contractor within 14 days of contractor receipt of the CAR. Examples of workmanship deficiencies include:

- Failure to follow all applicable laws, codes, and ordinances (such as not providing documentation
 of R value and material for insulation to occupant according to Michigan Residential Energy Code
 N1101.3.1).
- · Failure to provide homeowner with furnace calibration worksheet (start-up sheet)
- HVAC equipment is improperly installed or not operational
- HVAC system is over- or under-sized by more than 20,000 BTUs when compared to Manual J calculation
- Missing carbon monoxide detector, conforming to Underwriters Laboratory standard 2034,

- · Poor workmanship
- Test-out diagnostics incomplete or inaccurate (Example: greater than 10 percent variance between contractor test-out and quality assurance blower door results)
- Unvented combustion appliances defined by the Building Performance Institute as a health and safety issue left in the home
- · Other issues as noted by inspector

Programmatic Deficiencies

Programmatic deficiencies are issued by Michigan Saves during documentation review. Deficiencies must be addressed by the contractor within 30 days of contractor receipt of the CAR. Examples of programmatic deficiencies include:

- · Failure to submit COC or specification sheet in a timely manner
- Failure to respond to safety and workmanship CARs
- Financing of nonqualifying measures
- · Installation of measure was different than that noted on Michigan Saves specification sheet
- Installation of eligible measures not recorded on the specification sheet
- Misrepresentation
- · Other issues as noted by inspector

Contractor Response to Corrective Action Reports

All inspection noncompliance and/or deficiencies, whether safety, workmanship or programmatic, will be documented on a CAR and transmitted to the contractor. Contractors may be asked to submit a written response to Michigan Saves indicating how they have implemented the corrective action required, and what steps will be taken to prevent future deficiencies. Failure of the contractor to respond by the time designated on the CAR may result in a change in contractor status. Nonresponsive or late response to a CAR may result in the contractor's suspension or termination.

Response times may vary, and contractors should consult the CAR for the response time specific to a given project. General contractor response times to correct a deficiency of installation are shown below. Contractors may be required to implement longer-term measures to prevent further deficiencies in the future, such as staff training.

- Safety corrective actions: Must be remedied by the contractor within 48 hours or time noted on CAR.
- Workmanship corrective actions: If possible, deficiency must be remedied by the contractor
 within 14 days. If a remedy is not possible (i.e., the contractor has oversized a furnace) then the
 contractor may be asked by Michigan Saves to submit a written action plan to prevent future
 deficiencies.

• **Programmatic corrective actions:** If possible, deficiency must be remedied by the contractor within 30 days. If a remedy is not possible, then the contractor must submit to Michigan Saves a written action plan to prevent future deficiencies.

Michigan Saves is responsible for verifying and approving any corrective actions submitted by the contractor. If CARs are incomplete or do not adequately address the deficiency, the contractor will be notified of the deficiency by Michigan Saves and required to resubmit the CAR response.

Written Response

CARs include space for contractors to submit a written response to the deficiencies noted by the inspector. Upon request, contractors who receive a CAR should return it with a written response explaining what steps they will take to correct the noted deficiency (short-term corrective actions), as well as what steps they will take to ensure that such deficiencies are not repeated (long-term corrective actions). Long-term corrective actions may include changes to a contractor's business procedures and staff, or training for current staff. Objective evidence of corrective actions, such as pictures, training records, and updated procedural manuals, must be supplied for all safety and workmanship CARs and as needed for any minor CARs.

Corrective Action Examples

Example CARs and corrective actions are summarized in Table 7.

Table 6. Sample Corrective Actions

Deficiency	CAR Type	Response Time	Root Cause	Short-term Corrective Action	Long-term Corrective Action	Objective Evidence
Gas leaks	Safety	24 hours	Improper installation	Leak repaired within 24 hours of notice	Improved training of technicians	Customer confirmation of repair
Failure to submit COC and specification sheet in a timely manner	Programmatic	30 days	Not familiar with program requirements	Additional staff training	None	Proof of training
Oversizing of HVAC equipment	Workmanship	14 days	Incorrect Manual J calculation	Notice to all staff to perform and document Manual J calculations	None	Manual J software identified, and sample Manual J calculation performed by contractor
Installing ineligible measure	Programmatic	30 days	Not familiar with program requirements	Additional staff training	None	Proof of training

Deficiency	CAR Type	Response Time	Root Cause	Short-term Corrective Action	Long-term Corrective Action	Objective Evidence
Manual J calculation not completed	Workmanship	14 days	Manual J calculation not completed by staff	Reminder to staff to complete Manual J calculation for all installations	Installation checklist distributed to staff that includes all steps to be taken when installing a furnace, including sizing furnace with Manual J calculation	Copy of notice to staff and checklist submitted with written response

Contractor Participation Status

Contractors who successfully complete one project every 12 months, without any major issues, will remain in good standing. Michigan Saves staff will evaluate contractor performance on, at least, an annual basis to ensure that contractors continually meet our standards for workmanship and comply with program requirements. Michigan Saves reserves the right to terminate contractors, who do not meet our quality standards or who repeatedly fail to comply with program requirements.

Michigan Saves will use best judgment, based on the number and severity of issues, when determining if a contractor's participation in Michigan Saves should be terminated. Depending on the severity, number, and type, the following noncompliance issues could lead to a contractor's termination.

- Failure to complete one loan every 12 months or failure to pay the \$25 annual fee when a loan is not completed each year
- Failure to follow program guidelines and requirements, including form completion or installation requirements
- · Health and safety issue in home resulting from work
- · Loss of license or insurance or other requirements
- Misrepresentation
- · Convictions or disciplinary action by state or other official body

At all times, Michigan Saves, at its own discretion and without reason, retains the right to terminate a contractor from participating in the program.

Customer Inquiries and Complaints

Customer inquiries or complaints regarding services or equipment installed should be directed to the contractor. Michigan Saves encourages each customer to research the contractor's work through word of mouth; contractor ratings; customer networks, such as Angie's List; and the Better Business Bureau.

If a customer files a complaint with Michigan Saves regarding a contractor's performance, workmanship, or professionalism, Michigan Saves will note the complaint in the contractor's permanent file and take appropriate action. Repeated customer complaints can result in a contractor's suspension or termination from Michigan Saves. Customer complaints will be flagged and reviewed by Michigan Saves and may be prioritized for a site inspection. Site inspections do not constitute an effort to resolve any disagreement between the customer and the contractor.

Customers should direct any billing questions to TCL&P.

Metrics and Reporting

The program administrator will monitor the effectiveness and impacts of the on-bill financing program. Key metrics include the following:

- Number of loans
- Loan value (average and total)
- Energy savings (average and total)

The program administrator will have access to information on customer participation, measures installed, and utility savings in accordance with authorizations signed by participating customers. The program administrator and its officers, directors, and agents will take necessary precautions to protect the confidentiality of the customer and contractor information and will only use the information for evaluation and program management purposes.

Marketing

The program administrator will rely on two primary marketing efforts to promote the on-bill loan program. These two efforts will be spearheaded by Traverse City Light and Power and the program administrator.

Traverse City Light and Power's Marketing Efforts

Marketing efforts include utility's newsletter, program flyers, direct mailings, and marketing pieces at bill payment center. Postings to Traverse City's Light and Power's Twitter and Facebook page will be completed on a periodic basis. A link to all marketing materials will be available on Traverse City Light and Power's website.

Program Administrator Marketing Efforts

The program administrator will provide authorized contractors with a contractor marketing tool kit that stipulates marketing guidelines and resources to help authorized contractors promote the on-bill loan program to customers. The tool kit includes information, such as permitted and required uses of logos and other branding requirements, contractor identification cards, and sample copies of marketing materials.

Contractors can also follow the on-bill financing program branding guidelines to develop their own customized marketing materials with the on-bill financing program logo. Any use of Traverse City Light and Powers logo(s) must be requested in writing. Traverse City Light and Power reserves the right to deny and/or terminate a contractors use of its logo. The program administrator reserves the right to request changes to, or the termination of, any contractor- generated marketing materials that do not meet program or brand guidelines. The contractor bears all changes and associated costs. Contractors can request a review of draft materials, but this is not required.

At no time will the contractor represent its business as an agent or representative of Traverse City Light and Power or Michigan Saves. Contractors may represent themselves as an authorized contractor. The program administrator does not "certify," "approve," or "qualify" contractors. Any contracts between the contractor and its customers, or any third parties, shall clearly and conspicuously express that no agency relationship exists between the contractor and the program administrator.

Process to Amend the On-bill Loan Program

Traverse City Light and Power seeks to continuously improve the on-bill financing program. Suggestions may be sent to Jacob Hardy, 1131 Hastings St, Traverse City, MI 49686, jhardy@tclp.org. The suggested changes will be reviewed by program staff and may be presented to the program participants for consideration.

Traverse City Light and Power may change the conditions of their participation in the on-bill financing program, as allowed by PA 408 of 2014 and PA 342 of 2016.

Appendix A: Eligible Measures List

The Michigan Energy Measures Database contains the most recent and ruling version of the list of eligible measures. The following table has been inserted for reference.

Measure Description	Useful Life (yrs)
Appliances	MACHINE MACHINE
Clothes dryer	14
Clothes washer	11
Dehumidifier	12
Dishwasher	11
Freezer (chest)	21
Refrigerator/freezer	16
Building Envelope	
Air seal can lights	18
Attic/roof insulation	25
Attic hatch insulation	20
Basement wall insulation	25
Cool roofing	20
Crawlspace wall insulation	25
Door (exterior)	20
Door weatherstripping	
Duct insulation	20
Floor insulation	25
Infiltration reduction (Any %)	1;
Kneewall insulation	20
Pipe wrap	19
Rim joist insulation	25
Wall insulation	2
Windows	2
HVAC Improvements	
AC (package system)	1
AC (split system)	1:
Air source heat pump (ASHP)	1:
Boiler	20
Duct sealing	1
Electric water heater	1:
Furnace with energy conservation motor (ECM)	1

Measure Description	Useful Life (yrs)
HVAC Improvements (cont.)	
Gas tanked water heater	13
Ground source heat pump (GSHP)	15
Heat pump water heater	10
Instant gas water heater	20
Room air conditioner	15
Thermostat	9
Renewable Energy Improvements	
Solar domestic hot water	20
Solar PV	20
Other Energy Improvements	
Ceiling fans	15
CFL bulbs	9
LED bulbs	15
Whole house fan	15

Appendix B: Sample Loan Application

Below is a sample loan application for the Program. The actual Program loan application would be created and certified by the loan originator for the Program, once all participating utilities agree to program terms and conditions.



Loan Agreement & Disclosure Statement On-Bill Financing

Loan Date:	Loan Number:	Account Number:	H	Home Impr	ovemen	t Installment Contract
]			
Borrower				ower		
Name:			Nan			
Address:			Add	ress:		
☐ See Addendur	n for additional Borrov	vers and their signature	es	,		
		Truth In Le	nding	Disclosure		
ANNUAL PER	CENTAGE RATE	FINANCE CHARGE		Amount Final	nced	Total of Payments
	%	\$		\$		\$
						6
Number of Pa	yments	Amount of Paym	nents Payment		Payment	s Are Due:
				(9)		
payments	e	\$	ner n	nonth	Payments	are due on the same date
payment	3	Ψ	\$per month		as your utility bill starting not sooner	
	See Note under Pripage 2		omise	to Pay on	Paid Date	ays after the Contractor
Late Charge: If you do not pay a payment on				Property: This Agreement is made to finance energy		
time, you will owe a late charge in the amount of 5% of your monthly payment, if your payment is 10				improvements to the Borrowers' property known as:		
days or more delinquent.				Address:		
ridardos.						

Itemization of Amount Financed

Amount To Be Paid to Michigan Saves	Amount To Be Paid To Your Energy Improvement Contractor(s):	Total Amount to be Advanced
\$	\$	\$

Itemization of Amount Financed

By signing as Borrower, you agree to the terms of the Loan Agreement.

CAUTION: IT IS IMPORTANT THAT YOU THOROUGHLY READ THE AGREEMENT BEFORE YOU SIGN IT. DO NOT SIGN THIS AGREEMENT IF THERE ARE BLANKS.

This Agreement is secured by a lien on the property monthly payments that are not paid on time may be added to your tax bill and enforced against the Property through the tax lien foreclosure process in the same manner and with the same priority as the charges for your electric service and real property taxes.

The Borrowers who signed this Loan Agreement are all of the owners of the Property.

Dated: / /	Dated://
X	X
Borrower:	Borrower:
Title:	Title:

Additional Terms

In this Loan Agreement ("Agreement") all references to "we," "our," or "us," mean Traverse City Light and Power, whose name appears above and anyone to whom Traverse City Light and Power assigns or transfers this Agreement. All references to "you," or "your," mean each person who signs this Agreement as a borrower.

 PROMISE TO PAY. 	You promise to pay \$	to Traverse City Light and P	ower plus interest
on the unpaid balance	until what you owe has been	paid in full. The interest rate is	% per year.
You agree to pay	250	monthly payments in the amo	ount of
\$	per month. Note: the amou	unt of the last payment may be aff	fected by early or
maturity. The maturity	date is the date the final payn	id balance of principal and interes nent is due. Any electric rebates v	will be applied
towards the balance of exception of your payo		t your payment due date or sched	dule with the

- 2. **USE OF LOAN.** The loan proceeds will be used solely to pay for an energy audit of your property and energy improvements by your Energy Improvement Contractor(s), to your Property known as [Address], [City], Michigan [Zip Code]
- 3. **CONTRACTOR PAID DATE.** This date is the future date in which loan funds are disbursed to your Energy Improvement Contractor(s). This date occurs after all material and work has been satisfactorily completed per your contract with your Contractor and a certificate of completion signed by you is submitted.

- 4. **METHOD OF DISBURSEMENT.** We will disburse the cost of the energy audit and the cost of energy improvements to your Energy Improvement Contractor. We will notify you of the disbursement. The total balance of the amounts advanced may not exceed the Amounts Financed set forth on page 1. Payment to your energy improvement contractor are a part of charges for electric service to your property and create a statutory lien on the property.
- 5. BORROWERS' REPRESENTATIONS. You represent to us that:
 - a. The Borrower(s) who signed this Agreement are all of the owners of the Property and own it in the name of the Borrower(s).
 - b. You consent to Traverse City Light and Power or any third party originator or servicer sharing information about this loan with Traverse City Light and Power's Board of Directors.
 - c. You have contracted directly with an energy audit firm to audit and the Contractor to perform energy improvements to your property and agree that Traverse City Light and Power and its third party originators and servicers are not responsible for the audit firm's or Contractor's performance or the quality of their work or performance of any warranty.
 - d. You agree that you may not withhold payment on this Agreement for any amounts claimed to be owed to you for any claim against the energy audit firm or Energy Improvement Contractor except to the extent required to be allowed by MCL 445.1207.
 - e. If you sell or transfer your Property, you will advise the buyer of this Agreement and the on-bill payment obligations.
 - f. If the Property is or will be used for rental property, you or future owners shall keep the utilities in your name and will not file an affidavit or notice of the Tenant's responsibility for payment of charges for electric services. The filing of such an affidavit shall not affect the ability to add delinquent payments to future tax bills.
 - g. Borrower has determined that the execution of this Loan Agreement does not violate the terms of any mortgage or land contract signed by Borrower.
- 6. PAYMENTS BILLED ON ELECTRIC BILL. You agree to be billed your monthly payments on your Traverse City Light and Power electric bill in the monthly amount set forth above. The payments shall be a "per meter" charge and shall run with the property. The monthly payment billed by Traverse City Light and Power must be paid in order for it to provide electric service to the Property.

Payments will commence with the next monthly Traverse City Light and Power bill after disbursement to your Energy Improvement Contractor and arrangements are completed with Traverse City Light and Power. Payments will be due on the same date as your utility bill starting not sooner than 30 days after the contractor paid date.

Payments received by Traverse City Light and Power will be first applied to utility charges for electric, water and sewer, then to other utility charges and then to your loan payments described in paragraph 1.

- 7. **RECORDING OF MEMORANDUM AND NOTICE OF ON-BILL PAYMENT.** You agree that we may record a Memorandum and Notice of On-Bill Payment signed by you with respect to your Property. The Memorandum will be discharged or terminated by Traverse City Light and Power who is recording a notice of discharge.
- 8. **PREPAYMENT:** You may pre-pay the amount of principal, interest and other charges owed under this Agreement, in full or in part, at any time without penalty.
- 9. **DEFAULT.** You will be in default under this Agreement if you do not make a payment of the amount required on or before the date it is due. You will be in default if you break any promise or representation that you made in connection with this loan or if you made any false or misleading statements in your loan application. You will also be in default if something happens that we believe may seriously affect your

ability to repay what you own under this Agreement or if you are in default under any other loan agreement you have with us.

10. ACTIONS AFTER DEFAULT. When you are in default, we may demand immediate payment of the entire unpaid balance under this Agreement. You waive any right you have to receive demand for payment, notice of intent to demand immediate payment and notice of demand for immediate payment. If we demand immediate payment, you will continue to pay interest at rate provided for in this Agreement, until what you owe has been repaid. We may also exercise any other rights given by law when you are in default.

You also agree that the payments due under this Agreement may be enforced in the same manner as charges for electric services which may include shut off of electric service to the Property and placing the delinquent amounts on the real property tax bill for the Property. Once placed on the tax bill, the amounts due will be collected in the same manner, and with the same priority as real property taxes and all fees and charges applicable to delinquent taxes will apply.

- 11. **EACH PERSON RESPONSIBLE.** Each person who signs this Agreement will be individually and jointly responsible for paying the entire amount owed under this Agreement. This means we can enforce our rights against any of you individually or against all of you together.
- 12. **LATE CHARGE.** If you are late in making a payment, you promise to pay the late charge shown in the Truth in Lending Disclosure. If no late charge is shown, you will not be charged one.
- 13. **DELAY IN ENFORCING RIGHTS.** We can delay enforcing any of our rights under this Agreement any number of times without losing the ability to exercise our rights later. We can enforce this Agreement against your heirs or legal representatives.
- 14. **DUE ON SALE** If all or any part of the Premises or any interest in the Premises is sold or transferred without TCL&P's prior written consent, Borrower is in default and TCL&P may require immediate payment in full of all money then owed under this Agreement. However, this option may not be exercised if it is prohibited by law. If TCL&P exercises this option, it shall give Borrower notice of acceleration and Borrower and any unconsented transferee shall pay all such money within 30 days. If not so paid, TCL&P may invoke all remedies permitted by this Agreement without further notice or demand.
- 15. **CONTINUED EFFECTIVENESS.** If any part of this Agreement is determined by a court to be unenforceable, the rest will remain in effect.
- 16. NOTICES. Notices will be sent to you at the most recent address you have given us in writing. Notice to any one of you will be notice to all. In the event that you sell or transfer the Property, you agree that we may send notices and provide information about this Agreement to anyone who acquires an interest in the Property.

Notice to Traverse City Light and Power shall be in writing and delivered or mailed by certified mail to the offices of Traverse City Light and Power, at 1131 Hastings St., Traverse City, MI 49686.

- 17. **COMPLETE AGREEMENT.** This Agreement is the complete agreement between the parties and supersedes any prior representation, negotiation or agreement between the parties.
- 18. **AMENDMENTS.** This Agreement may only be amended or changed by an agreement in writing signed by Traverse City Light and Power, any other attempted or alleged amendments or changes shall be void and of no effect.
- 19. GOVERNING LAW. This Agreement shall be governed by the laws of the State of Michigan.

Information Concerning Energy Improvements Financed under Agreement

Borrowe Loan nu	er's Name(s): ımber:		2	***
Borrowe	er's Contractor 1:	Name: Address:		
Borrowe	er's Contractor 2:	Name: Address:		
Borrowe	er's Contractor 3:	Name: Address:		
Borrowe	er's Contractor 4:	Name: Address:		
a.	Cash Price for Energy I	mprovements, inc	cluding cost of audit:	\$
b.	Insurance or Warranty charge, if any:			\$
C.	Amount of official fees, if any:			\$
d.	Direct Payment to Contractor by Borrower:			\$
	Amount of Energy Imp		it Financed:	\$
	(total of a, b, c and d l	ess e)		

Description of Energy Improvements:

Energy efficiency home improvements and related services

Notice to Borrower:

- (1) Do not sign this Loan Agreement before you read it.
- (2) You are entitled to a completely filled-in copy of this Loan Agreement.
- (3) Under the law, you have the right to pay off in advance the full amount due and, under certain conditions, to obtain a partial refund of the finance charge.
- (4) You may rescind or cancel this Loan Agreement, not later than midnight on the third business day following the date you sign it by giving written notice of rescission to Traverse City Light and Power at its place of business or by mailing a notice of cancellation of the Loan Agreement to the Traverse City Light and Power, 1131 Hastings St, Traverse City MI, 49686 by depositing a properly addressed certified letter in a United States post office mail box, but if you rescind after midnight on the third business day following, you are still entitled to offer defenses in mitigation of damages and to pursue any rights of action or defenses that arise out of the transaction.

completed copy of it. Do not sign a contract for Energy Improvements if it contains blanks, I/We acknowledge reading the above Notice and receiving a complete copy of this Agreement by initialing and inserting the date here: Borrower 1 Signature Date Borrower 2 Signature Date TC Light and Power Authorized Signature Date Addendum to Traverse City Light and Power Financing Agreement {For when there are more than 2 Borrowers} Loan number:_____ The following additional persons or entities are additional Borrowers on the Traverse City Light and Power Financing Agreement, loan number ___. The undersigned acknowledge receiving a completed copy of the Financing Agreement, pages 1-4 and agree to be bound by its terms as a Borrower. Borrower #3: Address: Signature: X_____ Title: Dated: Borrower #4: Address: Signature: Title:

Dated:

(5) You should require that your Energy Improvement Contractor sign and provide you with a written contract that contains all of the terms of your contract with the Contractor and you should receive a

Appendix C: Memorandum and Notice of On-bill Payment Agreement

MEMORANDUM AND NOTICE OF ON-BILL PAYMENT AGREEMENT

THIS MEMORANDUM AND NOTICE OF ON-BILL FINANCING AGREEMENT is made thisday of, by and between, of(the "Owner") and Traverse City Light and Power of [address of capital provider/lender] Traverse City Light and Power.
Traverse City Light and Power of [address of capital provider/lender] Traverse City Light and Power.
WITHFOOFTH
WITNESSETH:
WHEREAS, Traverse City Light and Power and the Owner have entered into a Loan Agreement (the "Agreement") of even date herewith to finance energy improvements to the Property described below with payments billed as a per-meter charge on electric utility bills for the property; and
WHEREAS, the parties desire to enter into this Memorandum to give record notice of existence of the Agreement pursuant to MCL 460.969 (5).
NOW THEREFORE, for other good and valuable consideration, the Owner and Traverse City Light and Power acknowledge, and the parties give notice that:
1. They have entered into a Loan Agreement to finance energy improvements for the property known
as, [City, State, Zip], legally described as follows:
Tax Parcel No.:
(the "Property")
(inc Troporty)
2. The Agreement provides for the monthly payments due under the Agreement to be billed on the electric utility bill for the Property in the amount of \$per month with the last bill due on or before
3. The on-bill payments are deemed part of the charges for electric services to the property pursuant to MCL 460.999 and thus, are an obligation the runs with the land and the meter for the Property requiring payment
 in order to obtain electric service to the property. 4. Nonpayment of the electric bill and the loan payments can be enforced in the same manner as nonpayment of other charges for municipal electric services to the property, i.e., by shut-off of electric service or collected as taxes
The Agreement provides that the Owner and Owner's successors must keep the electric utility account in the owner's name may not file an affidavit of tenant responsibility for any unit of the Property while the
Agreement has an outstanding balance. 6. This Memorandum will be discharged only when the Agreement has been paid in full. Information about the Agreement, its terms, or the amount owed can be obtained from Lender at the address set forth above.
This instrument is exempt from transfer taxes, because this Memorandum and Notice is not an instrument of sale or transfer of the property but merely gives notice of the Agreement.

{Signatures on next page}

The parties hereto ha	ve executed this Men	norandum and Notice onday of
Owners:		
Ву:	, Owner	By:, Owner
[name of capital pro	vider/lender], Fund	
Ву:	, its President	
STATE OF MICHIGAN) ss.	
The foregoing instrum, by		ed before me inCounty, State of Michigan, thisof , Owners.
		Notary Public,County, Michigan My commission expires: Acting inCounty, Michigan
STATE OF MICHIGAR) ss.	
The foregoing instrum	ent was acknowledge as Presi	ed before me inCounty, State of Michigan, thisof ident of the [name of capital provider/lender].
		Notary Public,County, Michigan My commission expires: Acting in County, Michigan

TRAVERSE CITY LIGHT AND POWER DEPARTMENT RESOLUTION AND INTENT TO ADOPT ON BILL FINANCING FOR RESIDENTIAL CUSTOMERS

RESOLUTION OF INTENT TO ESTABLISH RESIDENTIAL CLEAN ENERGY FINANCING PLAN

WHEREAS, the Municipal Utility Residential Clean Energy Program Act, Public Act 408 of 2014, MCL 460.961 et seq., (the "Act") authorizes those cities that serve their residents with a municipal electric utility, such as the City of Traverse City, to adopt a residential clean energy program (an "Energy Program") to promote the use of renewable energy systems and energy efficiency improvements described in the Act (the "Energy Improvements") by record owners of certain real property;

WHEREAS, the Act authorizes a city to provide a plan for financing Energy Improvements funded with money appropriated by the municipality or provided by private or other sources; to authorize fees; to prescribe the powers and duties of certain governmental officers and entities; and to provide for remedies;

WHEREAS, the Traverse City Light and Power Department has expressed an interest in creating and funding an Energy Program known as the On-Bill Financing Program to help residents finance Energy Improvements;

WHEREAS, other municipalities have reported that housing in the residential areas of the territorial jurisdiction of the Traverse City Light and Power Department includes many one to four family homes that are below national, regional and state averages for energy efficiency;

WHEREAS, installation of Energy Improvements will promote the conservation of energy usage, lessen the burden on municipal and other utilities, lessen the burden on the residents of the City and will promote a better quality of housing stock in the territory of Traverse City Light and Power;

WHEREAS, the City desires to provide a program to stimulate installation of Energy Improvements in one to four family properties as allowed under the Act;

WHEREAS, a Report on the proposed program to provide financing of Energy Improvements through the On-Bill Financing Program has been prepared by Traverse City Light and Power (the "Report");

WHEREAS, the Report will be posted on the utility's web site at https://www.tclp.org/ and will be available in the offices of the City Clerk and Traverse City Light and Power Administration Offices.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

- 1. That upon recommendation of the Traverse City Light and Power Board, the City Commission of the City of Traverse City finds that the financing of Energy Improvements for one to four family properties serves a valid purpose by encouraging installation of Energy Improvements that promote energy conservation and a better quality of housing stock in the City and the utility's service area.
- That Traverse City Light and Power intends to use USDA loan funds or internal financing for financing Energy Improvements as outlined in the Report. The loans to home owners will be pursuant to agreements with the eligible property owners.
- 3. That the types of Energy Improvements that may be financed are stated in the Report and are allowed by MCL 460.961, et seq., and will be for one to four family homes.

- 5. That comments on the proposed Program and Report may be submitted in writing to the Office of the City Clerk or Traverse City Light and Power Administrative Office in advance of the public hearing or may be stated at the public hearing.
- 6. That the City Clerk is directed to publish notice of the time, place and purpose of the public hearing.

Ordinance No.	
---------------	--

Title: On-Bill Financing for Energy Improvements

CITY OF TRAVERSE CITY ORDAINS:

That Section 1046.04, On-Bill Financing, be added to the Traverse City Code of Ordinances to read in its entirety as follows:

§1046.04 ON-BILL FINANCING.

- (a) Pursuant to the Municipal Utility Residential Clean Energy Program Act ("Act"), MCL 460.961 et seq., the City of Traverse City hereby establishes a residential clean energy program to fund residential loans for energy efficiency as described in the Traverse City Light & Power Department Report, On-Bill Financing Program ("Report"). This Report is on file with the City Clerk and Traverse City Light & Power Department and is incorporated here by reference.
- (b) The Traverse City Light and Power Department is directed to and delegated authority to implement and administer the On-Bill Financing Program throughout its service area, to contract for its administration as allowed by the Act and to enter into contracts with residential owners.
- (c) The Traverse City Light & Power Department is authorized to apply for, receive and administer funds loaned from USDA, Rural Development, to fund all or part of the monies for the On-Bill Financing Program and the TCL&P Executive Director is authorized to execute all needed statements and assurances required by the USDA related to the loan.
- (d) Future amendments may be made to the Report by the City Commission by resolution without public hearing but filed with the City Clerk and Traverse City Light & Power Department.

Traverse City Light & Power Renewable Energy Goals And Capacity Planning August 13, 2019

Robert T. Dyer
RTD Consulting, LLC
2771 Monument Rd.
Suite 29, Box 337
Jacksonville, FL 32225



Plan for our Discussion

- Not here to question the Renewable goals of TCL&P.
- We are going to spend this time focusing on some key issues needed to understand the interworking's of the goals of TCL&P and requirements of the organizations TCL&P works with to serve the customers of TCL&P.
- We want to address not only the operational issues but the risk exposure to future operations.
- I want to leave time for questions.

Overview of what we are going to discuss

- TCL&P has adopted Renewable Energy Goals for 2020, 2025 and 2040
 - How is the goal measured?
 - Some suggested clarifications.
- TCL&P and MPPA are members of Midcontinent Independent System Operator (MISO) and operate through the Tariffs published by MISO and approved by the Federal Energy Regulatory Commission (FERC). How does this affect TCL&P and its goals?
- TCL&P is a member of Michigan Public Power (MPPA). What is their role in helping TCL&P in meeting the Renewable energy goal?
- What are some of the key issues needing to be dealt with to meet the targets and comply with the Tariffs of MISO?
- What Risk does this unique combination of goals and organizations pose to TCL&P?

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 - How is the goal measured?
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- What are some of the key issues needing to be dealt with to meet the targets and comply with the Tariffs of MISO?
- What Risk does this unique combination of goals and organizations pose to TCL&P?

TCL&P Renewable Goal

Traverse City Light & Power commits to setting a goal of providing 100% renewable power to its customers in a fiscally sound manner. The utility intends to meet this goal by progressing from its current renewable portfolio of roughly 12% (wind, landfill gas and solar) by achieving the following interim goals.

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TCL&P Renewable Goal Continued

First, TCL&P will obtain new generation capacity from clean energy to meet or exceed the statutory mandate of 15% from clean & renewable energy sources by 2021;

Second, TCL&P intends to obtain sufficient generation to fulfill at least 40% of its energy portfolio requirements from clean & renewable energy by 2025;

Third, the utility will strive to obtain 100% of its generation with renewable energy by or before 2040.

How are Renewable Energy Goals typically Measured

2018	Generation Entity	kWh
	Campbell #3 (Coal)	75,795,480
	Belle River (Coal)	60,828,315
	Combustion Turbine (Natural Gas)	28,734,261
	Bilateral Contract (Various)	93,532,000
	Load (Various)	56,069,174
	M-72 Wind Turbine (Renewable)	383,608
	M-72 Solar (Renewable)	1,334,400
	Stoney Corners Wind Farm (Renewable)	22,969,919
	Landfill Gas (Renewable)	10,304,572
		349,951,729
	Total Calendar Sales	341,482,534
	Renewable Total	33,658,099
	Renewable Percentage	9.86%

- Percent Renewable = (Renewable Energy/Total Energy Sold) x100
- 9.86%= (33658099/341658099) x100

Some Observations

TCL&P Renewable Goal:

- There appears to be a comingling of concepts between Capacity(Mw) and Energy(Mwh) and this needs to be resolved to insure understanding and proper measurement of the goals.
 - If these goals are clarified and measured, as typically seen within the industry, they appear to be achievable provided significant technological innovation is achieved in the energy storage arena.
 - This later observation is based on the current rules and regulations regarding the tariff of MISO.

TCL&P Renewable Goal

Traverse City Light & Power commits to setting a goal of providing 100% renewable energy power to its customers in a fiscally sound manner. The utility intends to meet this goal by progressing from its current renewable portfolio of roughly 12% (wind, landfill gas and solar) by achieving the following interim goals.

9

TCL&P Renewable Goal continued

First, TCL&P will obtain new energy generation resources capacity from clean energy to meet or exceed the statutory mandate of 15% from clean & renewable energy sources by 2021;

Second, TCL&P intends to obtain sufficient energy generation resources to fulfill at least 40% of its energy portfolio requirements from clean & renewable energy by 2025;

Third, the utility will strive to obtain 100% of its energy generation resources with renewable energy by or before 2040.

Overview of what we are going to discuss

- TCL&P has adopted Renewable Energy Goals for 2020, 2025 and 2040
 - How is the goal measured?
 - Some suggested clarifications.
- TCL&P and MPPA are members of Midcontinent Independent System Operator (MISO) and operate through the Tariffs published by MISO and approved by the Federal Energy Regulatory Commission (FERC). How does this affect TCL&P and its goals?
- TCL&P is a member of Michigan Public Power (MPPA). What is their role in help TCL&P in meeting the Renewable energy goal?
- What are some of the key issues needing to be dealt with to meet the targets and comply with the Tariffs of MISO?
- What Risk does this unique combination of goals and organizations pose to TCL&P?



Midcontinent Independent System Operator(MISO)

- Customer Service
- Effective Communication
- Operational Excellence
- MISO is an essential link in the safe, cost-effective delivery of electric power across much of North America. We are committed to reliability, the nondiscriminatory operation of the bulk power transmission system, and to collaborating on creating cost-effective and innovative solutions for our changing industry.



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What Does this previous statement mean to us?

- All Power and Energy is delivered to TCL&P through MISO.
 - Some resources from MPPA are grandfathered in as they pre-dated MISO.
 - All Capacity and Energy purchases are scheduled and coordinated through MISO.
 - The price of Energy purchased from MISO is the same for all participants as adjusted for dispatches to reduce transmission constraints and transmission losses.



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How it works

- Our focus is on Capacity(Mw) and Energy(Mwh).
 - Some basic understanding is needed on how Capacity and Energy is measured and managed.
- At a high level there are three markets within MISO:
- Capacity(Mw) Market
 - Measured once a year.
- Generation Energy (Mwh) Market.
 - All generation is sold to MISO.
- Load Energy (Mwh) Market.
 - All energy (Mwh) delivered to the customer is purchased from MISO.



Capacity

15

- Capacity (Mw) Requirements:
 - All members are required to meet their Capacity(Mw) obligations which are currently determined once a year.
 - There are three ways to meet this obligation:
 - Certified capacity owned or under contract to the member.
 - Bilateral capacity purchased by the member.
 - Purchased through the MISO Capacity auction.



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Capacity Continued

- Certified capacity owned by the member:
 - Capacity of each resource is assigned a rating by MISO to determine the amount of capacity(Mw) a specific generator provides to the system capacity requirement.
 - Traditional Generation equipment is based on the "availability of the equipment.
 - Example: Generator Rating 10Mw
 - MISO Rating for Availability 90%
 - MISO Capacity 9Mw



Capacity continued

- Bilateral capacity purchased by the member.
 - Capacity(Mw) can be purchased from other MISO Members.
 - This is typically a bilateral transaction between a willing buyer and seller at a negotiated price for a defined period of time.
 - Typically, TCL&P does these types of transactions through MPPA.
 - These types of transactions are usually for periods of one year or longer.

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Capacity Continued

- Purchased through the MISO Capacity auction.
 - Annually, MISO has a capacity(Mw) auction. Members advise MISO of their available capacity(Mw) and a minimum price they will accept.
 - Then those members who needs Capacity(Mw) are matched with sellers.
 - The highest prices used becomes the settling price for all.



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Load and Generation Energy Market

- All energy(Mwh) is delivered by MISO to "nodes" within the Transmission system. The price is based on Locational Marginal Prices (LMP).
 - MISO determines what resources are to be dispatched based on economic and "must run" resources.
 - Takes into consideration the "out of economics " dispatch needed to facilitate the delivery.
 - Incorporates the losses on the transmission system.
 - All energy(Mwh) delivered is based on the MISO dispatch and not related to any of TCL&P owned or contracted resources, including Renewables.

What are the Issues to be managed with the MISO Tariff

- The Tariff can be changed by filing a request with FERC.
- Any economic decision by TCL&P based on the Tariff in effect can be altered with a change in the tariff.
- TCL&P will have a voice at FERC in any hearing to change the Tariff. This representation has historically been through MPPA.
- The items that can change that would have the greatest effect on TCL&P:
 - How Capacity(Mw) requirements are measured and credit is awarded.

What are the Issues to be managed with the MISO Tariff

Continued

- Currently Capacity(Mw) requirements are determined based on the system's contribution to the peak demand of MISO measured on the peak hour once a year.
- An effort has already been made by MISO to alter this calculation from an annual to a quarterly basis.
- As the percent of renewables increase this issue will reemerge.
- As the percentage of renewables increases throughout MISO, the frequency of this measurement will likely increase to monthly, or possibly weekly to insure adequate capacity(Mw) is available to operate the system.

Overview of what we are going to discuss

- TCL&P has adopted Renewable Energy Goals for 2020, 2025 and 2040
 - ▶ How is the goal measured?
 - Some suggested clarifications.
- TCL&P and MPPA are members of Midcontinent Independent System Operator (MISO) and operate through the Tariffs published by MISO and approved by the Federal Energy Regulatory Commission (FERC). How does this affect TCL&P and its goals?
- TCL&P is a member of Michigan Public Power (MPPA). What is their role in helping TCL&P in meeting the Renewable energy goal?
- What are some of the key issues needing to be dealt with to meet the targets and comply with the Tariffs of MISO?
- What Risk does this unique combination of goals and organizations pose to TCL&P?

Michigan Public Power Agency

- MPPA has 22 Member Systems.
- TCL&P represents 5.3% of energy sales of MPPA based on 2018.
- MPPA represents .9724% of energy sales of MISO.
- TCL&P is .0515% of MISO by itself.
- TCL&P relies on MPPA to secure renewable energy and capacity as it aggregates the collective buying power of its member systems.
- MPPA has a history of being an effective lobby/ intervenor for its member systems in Michigan and before FERC when dealing with Consumers Power and Detroit Edison.

Michigan Public Power Agency Continued

- State Resource Adequacy Mandate-filling is through MPPA. Requires all utilities to demonstrate they own or have contracts for Capacity (Mw) to meet peak demand (Mw) plus reserves.
- Allocation of new capacity is typically done on a prorated basis. Adjusted for members who choose not to participate.
- Historically, MPPA has not secured resources for just one member.
- The scale of most projects will require multiple project participates.

Overview of what we are going to discuss

- TCL&P has adopted Renewable Energy Goals for 2020, 2025 and 2040
 - ▶ How is the goal measured?
 - Some suggested clarifications.
- TCL&P and MPPA are members of Midcontinent Independent System Operator (MISO) and operate through the Tariffs published by MISO and approved by the Federal Energy Regulatory Commission (FERC). How does this affect TCL&P and its goals?
- TCL&P is a member of Michigan Public Power (MPPA). What is their role in help TCL&P in meeting the Renewable energy goal?
- What are some of the key issues needing to be dealt with to meet the targets and comply with the Tariffs of MISO?
- What Risk does this unique combination of goals and organizations pose to TCL&P?

What are we going to cover

- How MISO tariff allows for de-linking Capacity(Mw) from Energy(Mwh) for Capacity(Mw) planning purposes.
- How Capacity(Mw) planning can be used to protect against changing the MISO Tariff.
- Some observed risk with Capacity(Mw) planning and the MISO Tariff.

Future Capacity(Mw) Sources

- With the changes to the policy, it is clear what the source of Energy(Mwh) is to be and how the percentage is measured.
- Some of the capacity(Mw) will come from Renewable source under the current MISO Tariff.
- As TCL&P retires traditional Capacity(MW) it will have to be replaced.
 - Some may come from new renewables.
 - Some may come from new technologies.
 - Some may come from conventional technologies.

How MISO made it possible to de-link Capacity from Energy

- Before MISO when a decision was made on the type of Capacity(Mw) it limited the choice of Energy(Mwh).
 - Base Load:
 - Nuclear
 - Coal
 - **■** Oil
 - Intermediate and Peaking:
 - **▶** Oil
 - Natural Gas

How MISO made it possible to de-link Capacity from Energy

- MISO Tariff allows the separation of Capacity(Mw) from Energy(Mwh).
 - ► It is now possible to mix low cost
 Capacity(Mw) without linking the
 Capacity(Mw) to its energy(Mwh) source.
 - The source of energy(Mwh) may be selected based on cost or its attributes, i.e. Renewable energy(Mwh) (Green).

How MISO made it possible to de-link Capacity from Energy

- The likely opportunities will be through MPPA.
 - Most projects will be larger projects than TCL&P will want to consider due to size and operational issues.
 - Working through MPPA will reduce risk i.e. operational and financial.
- MPPA will be the focal point, for the protection of Municipal systems in Michigan for potential changes to the MISO Tariff.

Capacity Planning and the Risk of MISO Tariff Changes

- The new replacement Capacity(Mw) that TCL&P adds is at risk of being not counted if it is subject to meteorological conditions.
 - Any capacity that changes due to wind or sunshine may be altered if the tariff is changed.
 - Currently not an issue.
 - How MISO Measures Capacity.
 - The frequency of the measurement.
- Conventional Capacity (Mw) is generally not affected by meteorological conditions.
- New Technologies are promising in the future.

Overview of what we are going to discuss

- → TCL&P has adopted Renewable Energy Goals for 2020, 2025 and 2040
 - ▶ How is the goal measured?
 - Some suggested clarifications.
- TCL&P and MPPA are members of Midcontinent Independent System Operator (MISO) and operate through the Tariffs published by MISO and approved by the Federal Energy Regulatory Commission (FERC). How does this affect TCL&P and its goals?
- TCL&P is a member of Michigan Public Power (MPPA). What is their role in help TCL&P in meeting the Renewable energy goal?
- What are some of the key issues needing to be dealt with to meet the targets and comply with the Tariffs of MISO?
- What Risk does this unique combination of goals and organizations pose to TCL&P?

Some Risk with Capacity planning and the MISO Tariff

- TCL&P goals will not run into any serious issues with MISO as long as MISO as a whole sees renewable energy at levels now being mandated.
- TCL&P goal for renewable energy appears to be achievable under the current tariff but the ability of TCL&P to influence MISO is extremely limited as TCL&P represent .0515% of MISO.
- MPPA maybe more effective at influencing MISO/FERC but only if the issue is affecting multiple members of MPPA.
- Changes made by MISO that adversely affects TCL&P will show up as higher cost to TCL&P but it is unlikely to put at risk electric service.
- These changes by MISO can occur in time periods of months while Capacity planning is generally multiple years to implement.

Some Observations

- Changing the TCL&P goals as suggested is a needed clarification to insure proper measurement.
- TCL&P is in a good position, working through MPPA to control long term cost for capacity planning by using a combination of renewable capacity and conventional capacity while meeting the TCL&P goals within the current MISO tariff.
- New technologies will assist TCL&P in meeting its obligations to MISO, meet its renewable goals and controlling cost to its customers but will likely still be dependent on traditional capacity.

Any Final Questions?



Michigan Public Power Agency

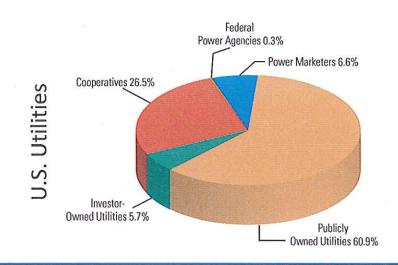
Delivering Value Added Energy Solutions and Services

Traverse City Light and Power Board August 13, 2019

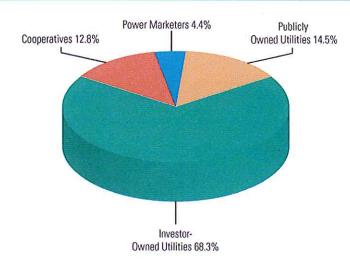


Public Power – United States

- Approximately 2,000 Public Power Entities in the United States
- Represent roughly 60% of Electric Utilities and 15% of the customers in United States
- Majority are Members of roughly 80
 Power Supply consortiums (largely Joint Action)
- JAAs pool resources to gain efficiency, share costs, obtain economies of scale and focus expertise
- JAAs like MPPA are an extension of the local utility



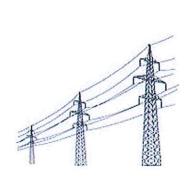
U.S. Customers





Public Power – Michigan

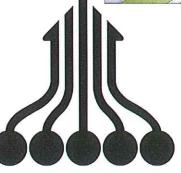
- 40 Municipal Electric Utilities in the State of Michigan (approx 2 GW or 10% of load)
- Joint Action Agencies (JAA) formed -1970s
 - Enabling Legislation
 - Formed consortiums to invest in baseload power projects
 - Pooled needs of its members, finance (bond) and own a % of central station power
 - Member participants under JAA obligated through Municipal Resolution
 - Project sharing economics & risk
- Michigan has 3 JAA's, MPPA, MSCPA and WPPI (UP Michigan)











JOINT ACTION



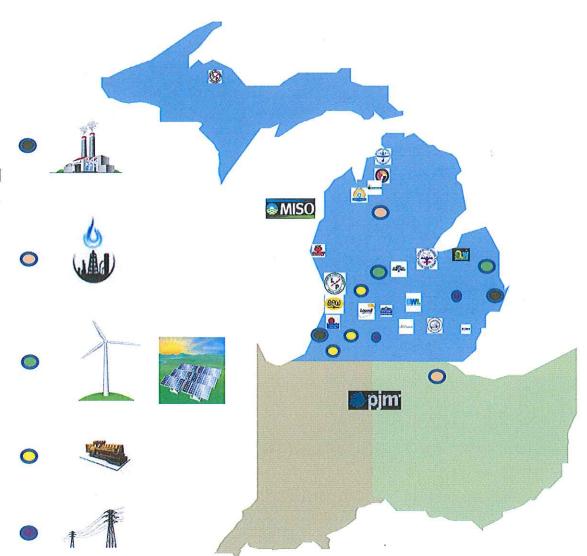
Michigan Public Power Agency

1978, Act 448 of 1976

- 40 + Years in Operation
- 22 Full Members
- 85% of Municipal electric retail energy sales
- 90 + % of Municipal Owned electric generation
- Two RTO's

Power Supply Resources

- ➤ Coal
- Natural Gas
- Wind
- > Solar
- > Landfill Gas
- Transmission





Project Based Agency

Project Based means a Member chooses to participate in Resources or Services that fit its needs

Project Committees

Fremont Energy Center Energy Services Combustion Turbine Renewables Transmission

Benefits of independence while leveraging expertise, resource sharing and economies of scale

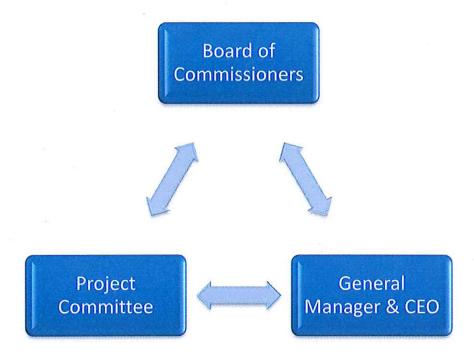
Service Committees





Governance System

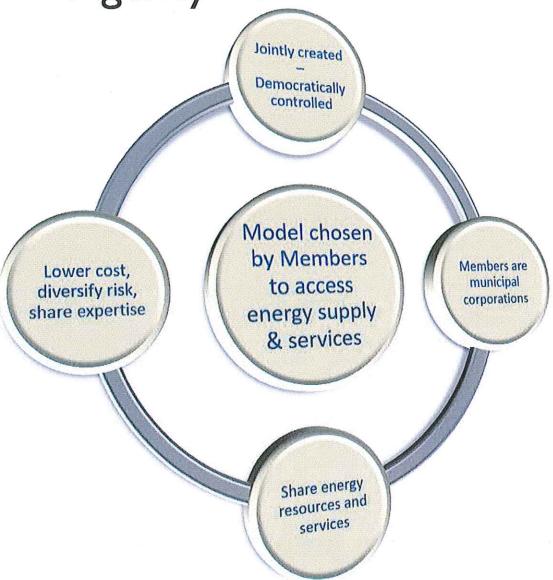
Governing structure based on checks and balances. Separation of authority ensures effective representation & decision-making



Resolutions approved by a majority vote of the Board of Commissioners



Agency Business Model





Economic Principles







Economies of Scale

Resource Diversity

Resource Sharing



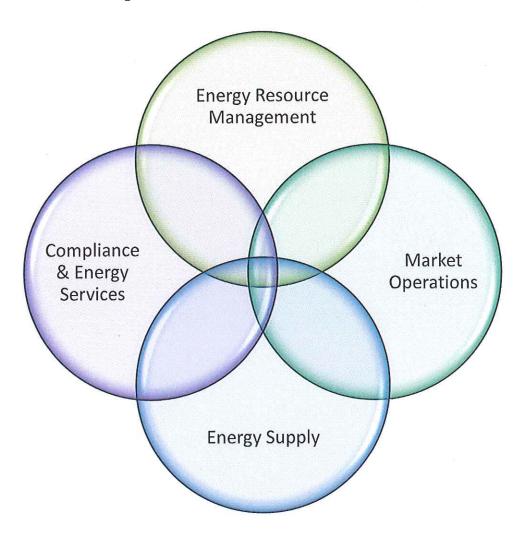


Lower funding costs

Knowledge / Experience



Primary Business Functions





TCLP and MPPA POWER SUPPLY

- Traverse City founding Member of MPPA (1978) 41 years
- Participate in Base Load Electric Generation Asset Projects
 - Campbell 3 (1980) joint-owner with Consumers Energy
 - Belle River (1984) joint-owner with Detroit Edison
- Participate in Peaking Electric Generation Project
 - Kalkaska CT (2002)
- Participate in Renewable Base Load Project
 - Landfill (2008)
- Participated in Power Pool (1989 -2010)
- Participate in the Energy Services Project (2012)
 - Market Operation Services
 - Power Supply



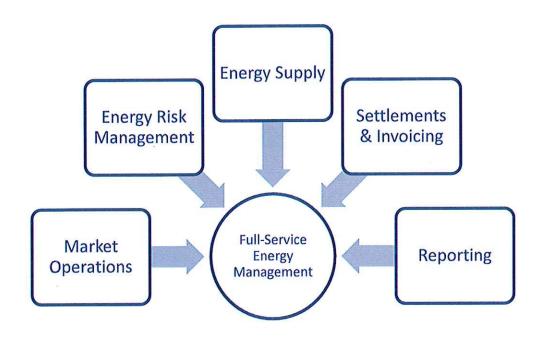


TCLP and MPPA SERVICES

Combined Cycle Unit Siting Study Voluntary **Shared Electric Utility Operational** GADS Green Pricing and or Administrative Services Renewable **MIRECS** Resource Renewable Energy Portfolio Efficiency Standards **Peaking** NERC Capacity Compliance



Energy Services Project



- Disciplined Power Supply Portfolio Plan
- Market Operation Services, Risk Management, Settlements and Reporting
- Aggregation and Diversification of Power Supply

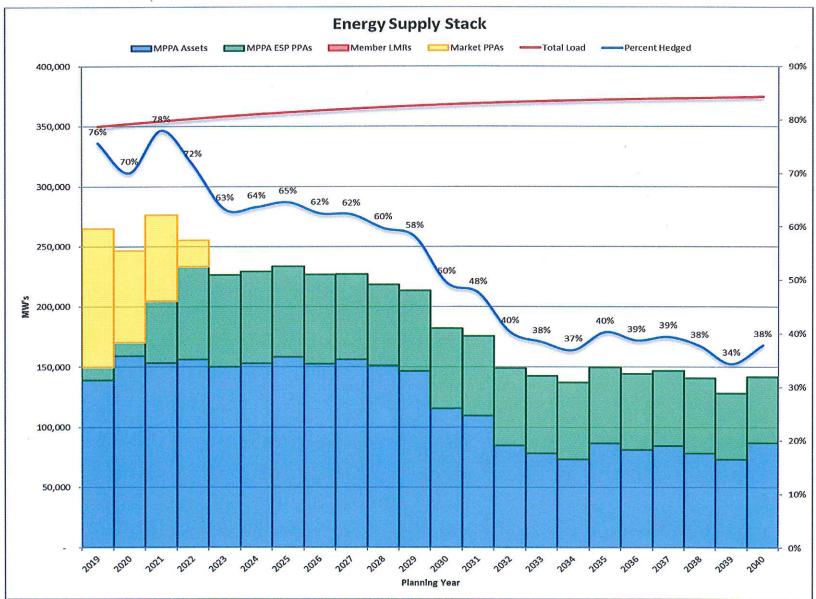
Critical foundation for operating economically in wholesale power markets



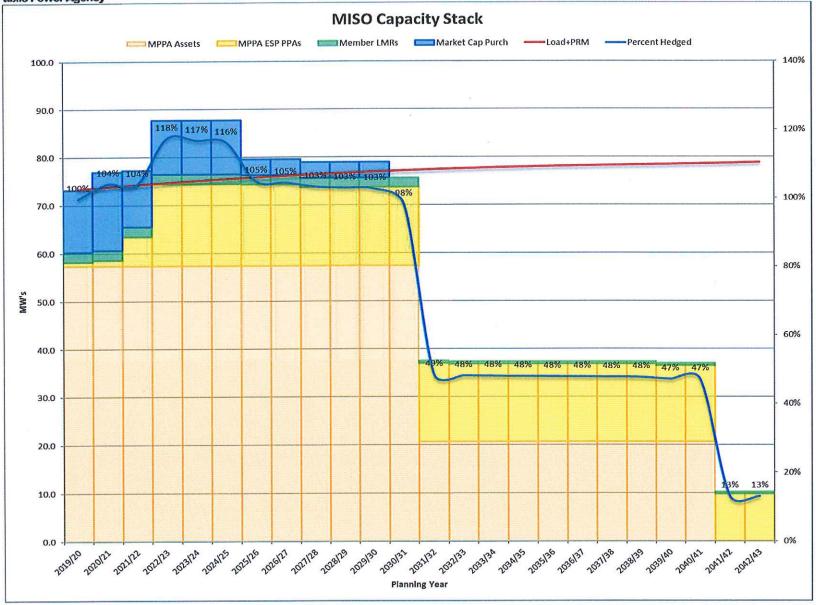
TCLP - Sources of Energy Supply Asset Projects, PPA's & Market Transactions

Project	MWh 2020	TCLP Energy % 2020	TCLP Energy % 2022	Note
Belle River	62,249	17.69%	17.59%	
Campbell 3	87,017	24.73%	23.70%	
Kalkaska CT	11,366	2.78%	2.62%	=
Renewable - Landfill	9,778	3.23%	3.18%	
Pegasus Wind	7,258	2.06%	2.03%	COD DEC 2019
Assembly Solar I	_	0.00%	6.14%	COD 2021
Assembly Solar II	_	0.00%	3.99%	COD 2022
Calhoun Solar		0.00%	6.14%	COD 2022
Local Renewables	25,840	7.34%	7.23%	
Forward Energy				
Transactions	76,074	21.62%	6.15%	n n
Wholesale Market	72,356	20.55%	21.23%	











Market forces

Leveling the playing field for public power

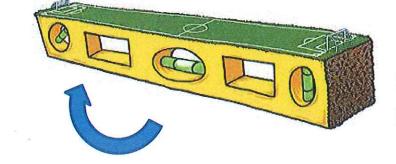
Distributed Energy Resources



Leverage local people & infrastructure

Natural Gas





Easily accessible, competitively priced for small users

Renewable Energy



Thru Joint Action – equivalent economics to IOU's

Competitive regional markets



Open access to all market participants, visibility of prices

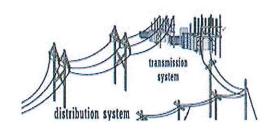
www.mpower.org © Michigan Public Power Agency



Joint Action & Public Power

can we advance to take advantage of market forces?

Invest in people, infrastructure & systems















Traverse City Light & Power August 13, 2019

Katie Abraham, Executive Director

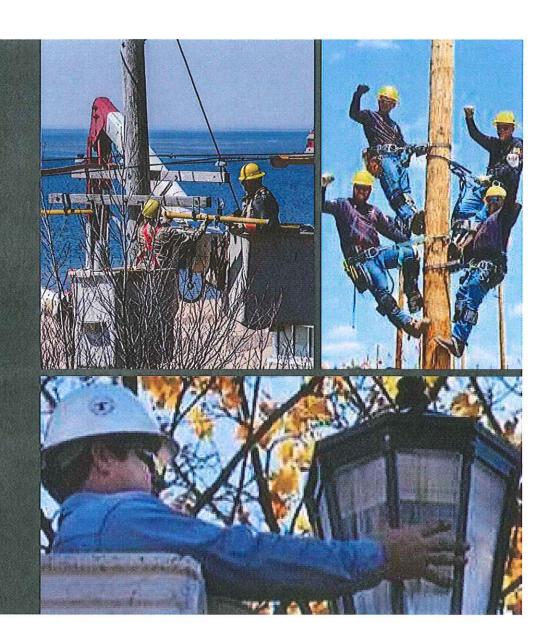
Who is the Michigan Municipal Electric Association (MMEA)?

- Trade group for Michigan's 40 municipally owned electric utilities
- Approx. 2GW or 10% of load
- Diverse in customer size:

Daggett < 200

Lansing Board of Water & Light ≈ 100,000

- Total over 300,000 customers
- Non-profit, community owned & operated



Where are we located?















Holland Board of Public Works













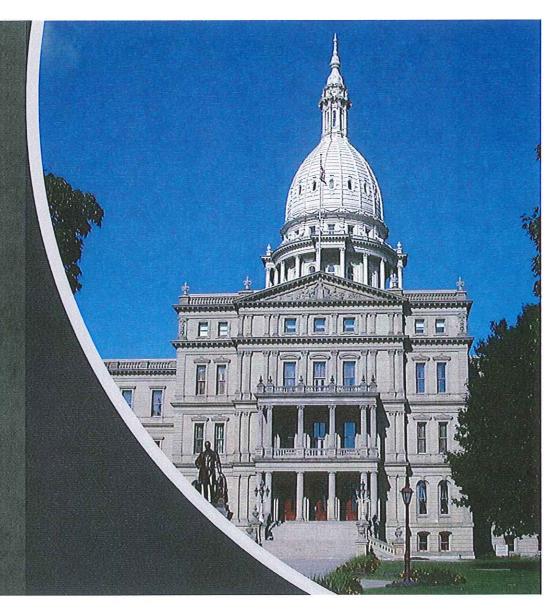




Governance

- MI Constitution 1963 Art. VII, Sec.24

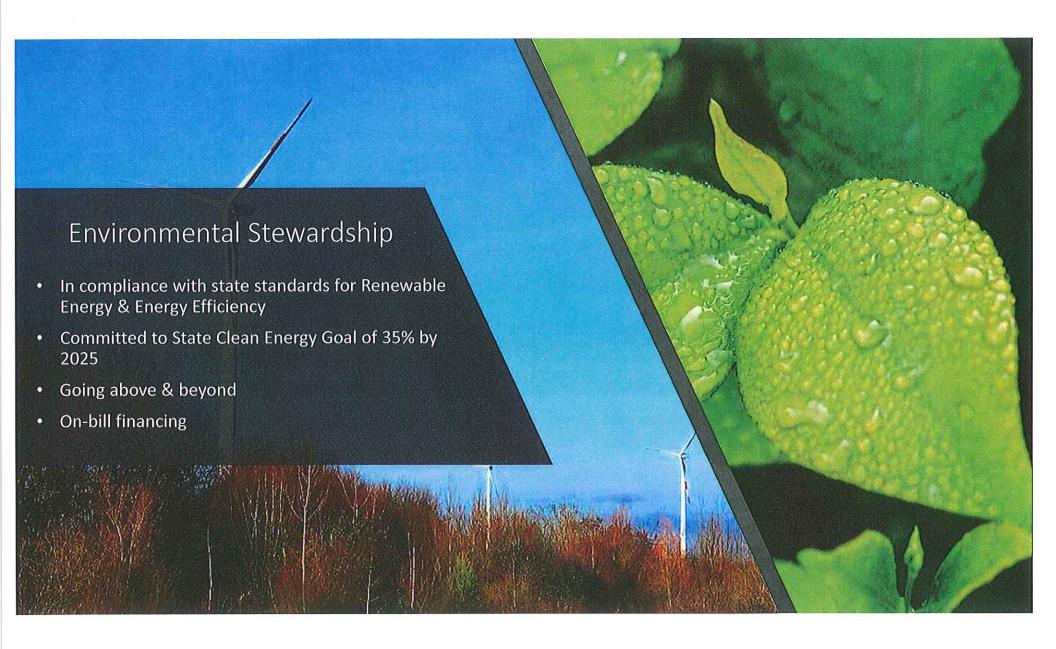
 ... Any city or village may acquire, own or operate, within or without its corporate limits, public service facilities for supplying water, light, heat, power, ..."
- Not regulated by the MPSC
- Regulated directly by the city & customers served



Rates & Reliability

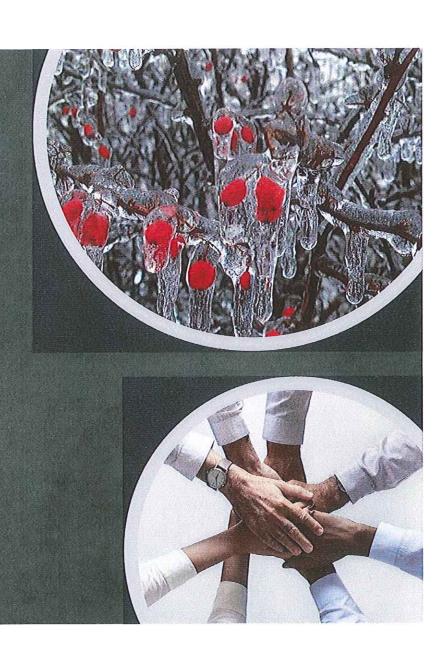
- Municipal utilities have competitive rates
- Compact service territory
- Local control & not-for-profit structure keeps rates in check





Mutual Aid

- Well developed process
- Coordinators located throughout state
- Strong partnership with Rural Electric Cooperatives







To:

Light & Power Board

From:

Tim Arends, Executive Director

Date:

August 2, 2019

Subject:

Capital Plan Update

Below is a summary recap of the capital plan for the fiscal year 2018-19. The capital plan provided for \$7,595,000 in capital expenses for the 2018-19 fiscal year end. The actual capital expense for the 2018-19 fiscal year end to date is approximately \$7,100,000.

This memorandum provides information only on line items or projects greater than \$50,000.

2018-19 CAPITAL IMPROVEMENTS PLAN PROJECTS

SUBSTATION

Parsons Road Substation Switching Station (\$1,560,000)

The board approved the project authorization request at the February 13, 2018 board meeting in the amount of \$1,560,000. A close out project report is expected to be brought to the board this fall. Project costs incurred to date are \$1,491,387.

Substation Circuit Exits (\$560,000)

The board approved the project authorization request at the February 13, 2018 board meeting in the amount of \$560,000. A close out project report is expected to be brought to the board this fall. Project costs incurred to date are \$493,019.

DISTRIBUTION

Line Improvements, Extensions and New Services (\$1,050,000)

The amount incurred to date is approximately \$1,101,900 exceeding the capital plan budget amount of \$1,050,000 by approximately \$51,900. This capital plan category represents completion of projects with internal labor, equipment and materials for new services and small reliability improvement projects accounted for in the work order system. Some of the projects include reimbursement by the customer.

PC-32 Distribution Circuit Rebuild (\$350,000)

The board approved the project authorization request at the March 13, 2018 board meeting in the amount of \$350,000. Construction commenced this spring and the project close out report will be brought to the board this fall. Project costs incurred to date are \$474,008. Minimal costs are yet to be incurred relating to labor and equipment to pull poles after other utilities transfer their pole attachments. The project costs are higher than the capital plan amount due to the project having an educational component with the internal crews working with the contractor and having hands on experience on how to install Hendrix. In addition,

nearly all pole holes required a vacuum truck and casings due to the soil being saturated with water causing additional costs in contracted labor and equipment along with materials.

HL-22 Distribution Circuit Rebuild (\$185,000)

The board approved the project authorization request at the May 8, 2018 board meeting in the amount of \$185,000. Construction commenced last fall and the project close out report is included within this board packet along with the explanation of the variance. Project costs incurred to date are \$373,112. Minimal costs are yet to be incurred relating to labor and equipment to pull poles after other utilities transfer their pole attachments.

Overhead to Underground Conversion Projects (\$310,000)

These projects were delayed until a prioritization matrix was developed by the Engineering Department. The matrix was presented with the 2019 Capital Improvement Plan.

Critical and Large Customers #2 (\$600,000)

The board approved the project authorization request at the March 13, 2018 board meeting in the amount of \$600,000. Construction commenced the spring of 2018 and a project close out report was presented to the board in the fall of 2018. Project costs incurred to date are \$392,723.

Hartman Road Overtie (\$475,000)

This project was moved out by both participating utilities due to the time needed to coordinate the project and other priorities.

FACILITIES AND OTHER

Hastings Service Center Facility Improvements (\$150,000)

The board approved a contract with Spence Brothers at the July 10, 2018 board meeting in the amount of \$72,800. Construction commenced last summer and was completed in the fall. Total costs for the project was approximately \$85,000 including legal review and architectural services. Staff has completed several other facility improvements including energy efficiency lighting upgrades in Building A and B in the amount of \$22,500, workout room in the amount of \$28,711, kitchen renovation in the amount of \$32,747, landscaping improvements in the amount of \$18,650 and installation of a new sign in the amount of \$7,200. Total facility improvements \$194,808.

SCADA System Upgrade (\$250,000)

Due to higher priority projects this has been delayed.

JOINT TCL&P, CITY OF TRAVERSE CITY AND DDA PROJECTS

Financial Software (\$75,000)

The utility will be invoiced \$25,000 for the share of the cost relating to the financial software system.

Lake Avenue Streetscapes Lighting (\$30,000)

The board approved reimbursement to the City in the amount of \$72,700 at the July 10, 2018 board meeting for new lighting circuit on Lake Avenue from Cass to Eighth Street. Project costs incurred to date are \$82,877. The City reimbursed TCL&P approximately \$35,000 for the lighting fixtures. The project is complete with minimal balance still owed to the City.

Automated Metering Infrastructure (\$2,000,000)

The board authorized the project authorization request at the August 9, 2016 board meeting for \$5,000,000. The contract was awarded to Eaton at the May 9, 2017 board meeting. The project commenced in the prior fiscal year and the project included in prior and current capital improvement plan. Project costs incurred to date are \$3,600,967 with a portion of the shared costs to be reimbursed up to \$166,000. Project costs for the fiscal year is \$2,739,854. The electric meters have been substantially exchanged and the focus is now on exchanging the water meters. A project close out report is expected to be presented to this board this winter/spring.

FIBER

Fiber to the Premise (\$3,666,667)

The board authorized execution of the construction and operation & maintenance agreement at the June 11, 2019 board meeting.

PROJECTS UPDATE NOT INCLUDED ON THE 2018-19 CAPITAL IMPROVEMENTS PLAN

Consumers 46KV Line

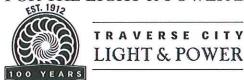
The board authorized a separate hourly rate contract with CC Power LLC for this project at the August 14, 2018 board meeting in the amount of \$83,700 for labor and equipment and \$18,464 for materials. Project costs incurred to date are \$112,354. This project is complete.

Critical and Large Project #4

The board approved the project authorization request at the February 12, 2019 board meeting in the amount of \$200,000. Construction commenced the spring of 2019 and a project close out report is included in this meeting's board packet. Project costs incurred to date are \$176,457.

Critical and Large Project #3

The board approved the project authorization at the April 9, 2019 board meeting in the amount of \$1,850,000. A portion of the project commenced this spring/summer and project costs incurred to date are \$51,035.



To:

Light & Power Board

From:

Karla Myers-Beman, Controller

Daren Dixon, Operations Manager

Date:

August 1, 2019

Subject:

HL-22 Distribution Circuit Rebuild and Critical and Large Customer #4 Project

The HL-22 Distribution Circuit Rebuild and Critical and Large Customer #4 Project has been completed and enclosed for your review are the financial results, which include the capital plan amount, budget, contracts and cash outlay.

HL-22 Distribution Circuit Rebuild (north of Eighth Street between Lake and Railroad Avenue)

Overall the project came in over budget by \$188,111 and was lower than contractual amounts by \$5,097.

The largest overage relates to the construction contract relating to 1) a compressed timeframe during busy construction season in order to get facilities out of the way for the City's paving project in the alley, 2) the project limits were extended 800' to connect with the rebuild done on BW-31 Circuit, and 3) a section was rerouted to remove primary from an inaccessible backyard.

Materials came over budget relating to the extension of the project for the purpose to connect with the rebuild done on BW-31 Circuit.

Critical and Large Customer #4 Project

Overall the project came in under budget by \$16,175.

Contracted labor and equipment came in over budget relating to the request for proposal time frame was within the busy construction season. This was needed to make sure TCL&P could provide in time sufficient capacity to serve the Customer's facility expansion.

Materials came in under budget relating to the line to the north did not get converted to underground because of the customer request taking into consideration possible future facility expansion.

Project Name		HL-22 Eighth Street Rebuild
--------------	--	-----------------------------

Sum of Amount	Column Labels				Over (Under)	Over (Under)
Row Labels	Capital Plan	Budget	Contract	Cash outlay	Budget	Contract
Contracted Labor & Equipment		105,000.00	278,324.00	274,241.75	169,241.75	(4,082.25)
Contract			278,324.00	274,241.75		
(blank)		105,000.00				
Engineering, Administrative & Construction Inspections		18,000.00	18,000.00	17,999.72	(0.28)	(0.28)
Contract			18,000.00	17,999.72		
(blank)		18,000.00				
Internal Labor & Equipment				1,487.33	1,487.33	
16121				361.63		
287				1,125.70		
Materials		47,000.00	34,397.38	78,974.83	31,974.83	
Direct Purchase				440.20		
Inventory				45,151.75		
P 2018-1684			34,397.38	33,382.88		(1,014.50)
(blank)		47,000.00				
Miscellaneous				408.00	408.00	
(blank)				408.00		
(blank)	185,000.00					
(blank)	185,000.00					
Contingency		15,000.00			(15,000.00)	
(blank)		15,000.00				
Grand Total	185,000.00	185,000.00	330,721.38	373,111.63	188,111.63	(5,097.03)

A New York of Contract of the Contract of	photos productive and accommodate of the control of
Project Name	Critical and Large Project #4

Sum of Amount	Column Labels			Over (Under) Over (Under)
Row Labels	Budget	Contract	Cash outlay	Budget Contract
Contracted Labor & Equipment	96,786.25	147,282.00	147,282.00	50,495.75
Contract		139,452.00	139,452.00	
(blank)	96,786.25			
S 2018-0875		3,945.00	3,945.00	
S 2018-0876		3,885.00	3,885.00	
Internal Engineering	8,025.39		3,357.51	(4,667.88)
325			3,357.51	
(blank)	8,025.39			
Internal Labor and Equipment			914.71	914.71
325			914.71	
Materials	63,741.50		24,902.45	(38,839.05)
Direct Purchase			2,267.45	
Inventory			22,635.00	
(blank)	63,741.50			
Contingency	24,079.16			(24,079.16)
(blank)	24,079.16			Committee to the Committee of the Commit
Grand Total	192,632.30	147,282.00	176,456.67	(16,175.63) -



To:

Light & Power Board

From:

Karla Myers-Beman, Controller

Date:

August 1, 2019

Subject:

Audit Engagement and Audit Questionnaire

The City Commission at the April 15, 2019 meeting approved a second three-year agreement with Vredeveld Haefner LLC for auditing services. Based on input from the Treasurer's office, Light and Power and Downtown Development Authority staff. Included within your board packet is a copy of the current year's audit engagement letter. The engagement letter provides information regarding the auditor's responsibilities under generally accepted auditing standards and the planned scope and timing of the scheduled audit engagement.

Along with the audit engagement letter is an Audit Questionnaire for the Governing Board. This is required by Statement of Auditing Standards 99: Consideration of Fraud in a Financial Statement Audit. Please fill out the audit questionnaire and return it directly to the auditors via email dvredeveld@vhcpas.com or mail to the address included on the letterhead. An additional option is to call the auditors directly and answer the questions verbally. Doug Vredeveld, Principal can be reached at 1-616-446-7474.

Thank you in advance for your cooperation in this matter.



Vredeveld Haefner LLC

CPAs and Consultants 10302 20th Avenue Grand Rapids, MI 49534 Fax (616) 828-0307 Douglas J. Vredeveld, CPA (616) 446-7474 Peter S. Haefner, CPA (616) 460-9388

July 12, 2019

Board of Directors Traverse City Light and Power 1131 Hastings Street Traverse City, MI 49684

Effective two-way communication between Vredeveld Haefner LLC and the Light and Power Board is important to understanding matters related to the audit and in developing a constructive working relationship. The attached engagement letter provides information regarding our responsibilities under generally accepted auditing standards and the planned scope and timing of the scheduled audit engagement. We will also provide you with timely communications regarding the results of our audit upon completion of the engagement.

We are requesting input from the Board for the purpose of planning the scheduled audit engagement. This input may be provided through the completion of the attached questionnaire or by a direct meeting of an engagement partner and the Board or an Board member.

If you have questions about this letter or any aspects of the scheduled audit engagement we would be happy to discuss it further with the Board, we can be reached at the telephone numbers listed above or via website links at who.purceited above or via website links at who.purceited appreciate your assistance and the opportunity to be of service to the Board.

Sincerely,

Vredeveld Haefner LLC

Douglas J. Vredeveld, CPA

Partne

Traverse City Light & Power Audit Questionnaire for the Governing Board

To help us with the process of planning the audit engagement, please provide your input on the following topics.

Identify any of the following which occurred activity/highlights, significant changes in the organ staffing, service levels, or operations)	during the year being audited: (significant financial nization or its operating environment, significant change in
Provide any information, and or suspicions you organization in the year being audited. Please ide fraud, who perpetrated it, how it occurred, how it was	u have regarding fraud, or suspected fraud within your entify the nature and magnitude of the fraud or suspected as detected, etc.
Please identify any concerns you have regarding the	e integrity or competence of senior management.
	,
How does the Board exercise oversight in the organization has established to mit	nization's assessment of the risks of fraud and the programs igate those risks?
Where in your organization do you believe fraud cou	uld occur?
Please provide any additional information which you	believe may be relevant to the audit process.
=_ \	
Are there additional analysis or specific procedures procedures?	s you would like to have performed in addition to our audit
Please return your completed questionnaire to:	
Vredeveld Haefner LLC	Completed by:
10302 20th Ave. NW Grand Rapids, MI 49534	Title:



Vredeveld Haefner LLC

CPAs and Consultants 10302 20th Avenue Grand Rapids, MI 49534 Fax (616) 828-0307 Douglas J. Vredeveld, CPA (616) 446-7474 Peter S. Haefner, CPA (616) 460-9388

July 12, 2019

Board of Directors Traverse City Light and Power 1131 Hastings Street Traverse City, MI 49684

We are pleased to confirm our understanding of the services we are to provide Traverse City Light and Power (the "Utility") for the year ended June 30, 2019. We will audit the financial statements of the business-type activities and each major fund, including the related notes to the financial statements, which collectively comprise the basic financial statements of Traverse City Light and Power (a component unit of the City of Traverse City, Michigan) as of and for the year ended June 30, 2019. Accounting standards generally accepted in the United States provide for certain required supplementary information (RSI), such as management's discussion and analysis (MD&A), to supplement Traverse City Light and Power's basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. As part of our engagement, we will apply certain limited procedures to Traverse City Light and Power's RSI in accordance with auditing standards generally accepted in the United States of America. These limited procedures will consist of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We will not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance. The following RSI is required by generally accepted accounting principles and will be subjected to certain limited procedures, but will not be audited:

- 1. Management's Discussion and Analysis.
- 2. Pension schedules.

The following additional information accompanying the financial statements will not be subjected to the auditing procedures applied in our audit of the financial statements, and for which our auditor's report will not provide an opinion or any assurance.

- 1. Schedule of Capital Assets and Depreciation
- 2. Schedules of Revenues and Expenditures Budget and Actual

Audit Objectives

The objective of our audit is the expression of opinions as to whether your basic financial statements are fairly presented, in all material respects, in conformity with U.S. generally accepted accounting principles and to report on the fairness of the supplementary information referred to in the second paragraph when considered in relation to the financial statements as a whole. Our audit will be conducted in accordance with auditing standards generally accepted in the United States of America and the standards for financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, and will include tests of the accounting records of Traverse City Light and Power and other procedures we consider necessary to enable us to express such opinions. We will issue a written report upon completion of our audit of Traverse City Light and Power's financial statements. Our report will be addressed to the governing board of the Utility. We cannot provide assurance that unmodified opinions will be expressed. Circumstances may arise in which it is necessary for us to modify our opinions or add emphasis-of-matter or

other-matter paragraphs. If our opinions on the financial statements are other than unmodified, we will discuss the reasons with you in advance. If, for any reason, we are unable to complete the audit or are unable to form or have not formed opinions, we may decline to express opinions or issue reports, or may withdraw from this engagement.

We will also provide a report (that does not include an opinion) on internal control related to the financial statements and compliance with the provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a material effect on the financial statements as required by *Government Auditing Standards*. The reports on internal control and compliance will each include a paragraph that states (1) that the purpose of the report is solely to describe the scope of testing of internal control over financial reporting and compliance, and the result of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance, and (2) the report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering internal control over financial reporting and compliance. The paragraph will also state that the report is not suitable for any other purpose. If during our audit we become aware that Traverse City Light and Power is subject to an audit requirement that is not encompassed in the terms of this engagement, we will communicate to management and those charged with governance that an audit in accordance with U.S. generally accepted auditing standards and the standards for financial audits contained in *Government Auditing Standards* may not satisfy the relevant legal, regulatory, or contractual requirements.

Audit Procedures—General

An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; therefore, our audit will involve judgment about the number of transactions to be examined and the areas to be tested. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We will plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether from (1) errors, (2) fraudulent financial reporting, (3) misappropriation of assets, or (4) violations of laws or governmental regulations that are attributable to the entity or to acts by management or employees acting on behalf of the entity. Because the determination of abuse is subjective, *Government Auditing Standards* do not expect auditors to provide reasonable assurance of detecting abuse.

Because of the inherent limitations of an audit, combined with the inherent limitations of internal control, and because we will not perform a detailed examination of all transactions, there is a risk that material misstatements may exist and not be detected by us, even though the audit is properly planned and performed in accordance with U.S. generally accepted auditing standards and *Government Auditing Standards*. In addition, an audit is not designed to detect immaterial misstatements or violations of laws or governmental regulations that do not have a direct and material effect on the financial statements. However, we will inform the appropriate level of management of any material errors and any fraudulent financial reporting or misappropriation of assets that come to our attention. We will also inform the appropriate level of management of any violations of laws or governmental regulations that come to our attention, unless clearly inconsequential, and of any material abuse that comes to our attention. Our responsibility as auditors is limited to the period covered by our audit and does not extend to later periods for which we are not engaged as auditors.

Our procedures will include tests of documentary evidence supporting the transactions recorded in the accounts, and may include tests of the physical existence of inventories, and direct confirmation of receivables and certain other assets and liabilities by correspondence with selected individuals, funding sources, creditors, and financial institutions. We may request written representations from your attorneys as part of the engagement, and they may bill you for responding to this inquiry. At the conclusion of our audit, we will require certain written representations from you about your responsibilities for the financial statements; compliance with laws, regulations, contracts, and grant agreements; and other responsibilities required by generally accepted auditing standards.

Audit Procedures—Internal Controls

Our audit will include obtaining an understanding of the entity and its environment, including internal control, sufficient to assess the risks of material misstatement of the financial statements and to design the nature, timing, and extent of further audit procedures. Tests of controls may be performed to test the effectiveness

of certain controls that we consider relevant to preventing and detecting errors and fraud that are material to the financial statements and to preventing and detecting misstatements resulting from illegal acts and other noncompliance matters that have a direct and material effect on the financial statements. Our tests, if performed, will be less in scope than would be necessary to render an opinion on internal control and, accordingly, no opinion will be expressed in our report on internal control issued pursuant to *Government Auditing Standards*.

An audit is not designed to provide assurance on internal control or to identify significant deficiencies or material weaknesses. Accordingly, we will express no such opinion. However, during the audit, we will communicate to management and those charged with governance internal control related matters that are required to be communicated under AICPA professional standards and *Government Auditing Standards*.

Audit Procedures—Compliance

As part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we will perform tests of Traverse City Light and Power's compliance with the provisions of applicable laws, regulations, contracts, agreements, and grants. However, the objective of our audit will not be to provide an opinion on overall compliance and we will not express such an opinion in our report on compliance issued pursuant to *Government Auditing Standards*.

Other Services

We will also assist in preparing the financial statements and related notes of the Utility in conformity with U.S. generally accepted accounting principles based on information provided by you. These nonaudit services do not constitute an audit under *Government Auditing Standards* and such services will not be conducted in accordance with *Government Auditing Standards*. We will perform the services in accordance with applicable professional standards. The other services are limited to the financial statement services previously defined. We, in our sole professional judgment, reserve the right to refuse to perform any procedure or take any action that could be construed as assuming management responsibilities.

Management Responsibilities

Management is responsible for designing, implementing, establishing and maintaining effective internal controls, relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error, including evaluating and monitoring ongoing activities, to help ensure that appropriate goals and objectives are met; following laws and regulations; and ensuring that management is reliable and financial information is reliable and properly reported. Management is also responsible for implementing systems designed to achieve compliance with applicable laws, regulations, contracts, and grant agreements. You are also responsible for the selection and application of accounting principles; and for the preparation and fair presentation of the financial statements in conformity with U.S. generally accepted accounting principles, and for compliance with applicable laws and regulations and the provisions of contracts and grant agreements.

Management is also responsible for making all financial records and related information available to us and for the accuracy and completeness of that information. You are also responsible for providing us with (1) access to all information of which you are aware that is relevant to the preparation and fair presentation of the financial statements, (2) additional information that we may request for the purpose of the audit, and (3) unrestricted access to persons within the government from whom we determine it necessary to obtain audit evidence.

Your responsibilities include adjusting the financial statements to correct material misstatements and for confirming to us in the written representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented are immaterial, both individually and in the aggregate, to the financial statements taken as a whole.

You are responsible for the design and implementation of programs and controls to prevent and detect fraud, and for informing us about all known or suspected fraud affecting the government involving (1) management, (2) employees who have significant roles in internal control, and (3) others where the fraud could have a material effect on the financial statements. Your responsibilities include informing us of your knowledge of any allegations of fraud or suspected fraud affecting the government received in communications from employees, former employees, grantors, regulators, or others. In addition, you are responsible for identifying

and ensuring that the entity complies with applicable laws, regulations, contracts, agreements, and grants and for taking timely and appropriate steps to remedy fraud and noncompliance with provisions of laws, regulations, contracts or grant agreements, or abuse that we report.

Management is responsible for establishing and maintaining a process for tracking the status of audit findings and recommendations. Management is also responsible for identifying and providing report copies of previous financial audits, attestation engagements performance audits or other studies related to the objectives discussed in the Audit Objectives section of this letter. This responsibility includes relaying to us corrective actions taken to address significant findings and recommendations resulting from those audits, attestation engagements, performance audits, or other studies. You are also responsible for providing management's views on our current findings, conclusions, and recommendations, as well as your planned corrective actions, for the report, and for the timing and format for providing that information.

You agree to assume all management responsibilities relating to the financial statements and related notes and any other nonaudit services we provide. You will be required to acknowledge in the management representation letter our assistance with preparation of the financial statements and related notes and that you have reviewed and approved the financial statements and related notes prior to their issuance and have accepted responsibility for them. Further, you agree to oversee the nonaudit services by designating an individual, preferably from senior management, with suitable skill, knowledge, or experience; evaluate the adequacy and results of those services; and accept responsibility for them.

With regard to the electronic dissemination of audited financial statements, including financial statements published electronically on your website, you understand that electronic sites are a means to distribute information and, therefore, we are not required to read the information contained in these sites or to consider the consistency of other information in the electronic site with the original document.

Engagement Administration, Fees, and Other

We understand that your employees will prepare all cash or other confirmations we request and will locate any documents selected by us for testing.

We will provide copies of our reports to the management of the Utility however, management is responsible for distribution of the reports and the financial statements. Unless restricted by law or regulation, or containing privileged and confidential information, copies of our reports are to be made available for public inspection.

The audit documentation for this engagement is the property of Vredeveld Haefner LLC and constitutes confidential information. However, pursuant to authority given by law or regulation, we may be requested to make certain audit documentation available to the State of Michigan or its designee, a federal agency providing direct or indirect funding, or the U.S. Government Accountability Office for purposes of a quality review of the audit, to resolve audit findings, or to carry out oversight responsibilities. We will notify you of any such request. If requested, access to such audit documentation will be provided under the supervision of Vredeveld Haefner LLC personnel. Furthermore, upon request, we may provide copies of selected audit documentation to the aforementioned parties. These parties may intend, or decide, to distribute the copies or information contained therein to others, including other governmental agencies.

The audit documentation for this engagement will be retained for a minimum of five years after the report release date or for any additional period requested by the State of Michigan. If we are aware that a federal awarding agency or auditee is contesting an audit finding, we will contact the party(ies) contesting the audit finding for guidance prior to destroying the audit documentation.

We expect to begin our audit on approximately October 28, 2019 and to issue our reports no later than December 31, 2019. Peter Haefner is the engagement partner and is responsible for supervising the engagement and signing the report or authorizing another individual to sign them.

Our fee for these services will be at our standard hourly rates plus out-of-pocket costs (such as report reproduction, word processing, postage, travel, copies, telephone, etc.) except that we agree that our gross fee, including expenses, will not exceed \$8,000 for the audit. Our standard hourly rates vary according to the degree of responsibility involved and the experience level of the personnel assigned to your audit. Our invoices for these fees will be rendered each month as work progresses and are payable on presentation. In accordance with our firm policies, work may be suspended if your account becomes 30 days or more

overdue and may not be resumed until your account is paid in full. If we elect to terminate our services for nonpayment, our engagement will be deemed to have been completed upon written notification of termination, even if we have not completed our report. You will be obligated to compensate us for all time expended and to reimburse us for all out-of-pocket costs through the date of termination. The above fee is based on anticipated cooperation from your personnel and the assumption that unexpected circumstances will not be encountered during the audit. If significant additional time is necessary, we will discuss it with you and arrive at a new fee estimate before we incur the additional costs.

We appreciate the opportunity to be of service to Traverse City Light and Power and believe this letter accurately summarizes the significant terms of our engagement. If you have any questions, please let us know. If you agree with the terms of our engagement as described in this letter, please sign the enclosed copy and return it to us.

Sincerely,

Vredeveld Haefner LLC

Douglas J. Vredeveld, CPA

Partner

RESPONSE:

This letter correctly sets forth the understanding of Traverse City Light and Power.

By:

Title:

Date: