

**A REGULAR MEETING**

Of The

**TRAVERSE CITY LIGHT AND POWER BOARD**

Will Be Held On

**TUESDAY, August 27, 2013**

At

**5:15 p.m.**

In The

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

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

Stephanie Tvardek  
Administrative Assistant  
1131 Hastings Street  
Traverse City, MI 49686  
(231) 932-4543

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

Posting Date: 08-22-13  
2:00 p.m.

## **AGENDA**

### **Pledge of Allegiance**

#### **1. Roll Call**

#### **2. Consent Calendar**

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

- a. Consideration of approving minutes of the Strategic Planning Session and Regular Meeting of August 13, 2013. (Approval recommended) (p. 4)
- b. METC-TCL&P-Wolverine – Amended Grand Traverse Substation Interconnection Facilities Agreement. (Approval recommended) (Arends) (p. 7)

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

- a.

#### **3. Unfinished Business**

None.

#### **4. New Business**

- a. Consideration of authorizing the TCL&P/Consumers Amendment No. 2 to the Joint Pole Attachment Agreement. (Arends) (p. 24)
- b. Consideration of authorizing an Agreement with GRP Engineering, Inc. for transmission line design & inspection services. (Arends) (p. 41)
- c. Consideration of authorizing a Service Order for the continuation of the TC Saves Program. (Wheaton/Brian Beauchamp/Sarna Salzman) (p. 47)

#### **5. Appointments**

None.

#### **6. Reports and Communications**

- a. From Legal Counsel.
- b. From Staff.

1. Strategic Planning update. (Arends) (p. 56)

2. *TCL&P news and correspondence. (General – No Official Report) (p. 58)*

c. From Board.

**7. Public Comment**

/st

**TRAVERSE CITY  
LIGHT AND POWER BOARD**

Minutes of Light and Power Board Strategic Planning Session  
Held at 12:00 p.m., Commission Chambers, Governmental Center  
Tuesday, August 13, 2013

**LIGHT AND POWER BOARD MEMBERS -**

Present: Barbara Budros, Jim Carruthers, Jan Geht, Jeff Palisin, Bob Spence, John Taylor, Pat McGuire

**EX OFFICIO MEMBER -**

Present: Jered Ottenwess, City Manager

**OTHERS:** Tim Arends  
Tim Blodgett, Steve VanderMeer (Hometown Connections)

The meeting was called to order at 12:17 p.m. by Chairman McGuire.

**1. Strategic Planning**

The Board discussed the strategic plan for TCL&P.

**3. Public Comment**

No one from the public commented.

There being no objection, Chairman McGuire declared the meeting adjourned at 4:25 p.m.

/st

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Tim Arends, Secretary  
LIGHT AND POWER BOARD



**TRAVERSE CITY  
LIGHT AND POWER BOARD**

Minutes of Regular Meeting  
Held at 5:15 p.m., Commission Chambers, Governmental Center  
Tuesday, August 13, 2013

**Board Members -**

Present: Barbara Budros, Jim Carruthers, Jan Geht, Jeff Palisin, Bob Spence,  
John Taylor, Patrick McGuire

**Ex Officio Member -**

Present: Jered Ottenwess, City Manager

**Others:** Tim Arends, W. Peter Doren, Scott Menhart, Karla Myers-Beman, Tom  
Olney, Stephanie Tvardek, Jessica Wheaton

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

Chairman McGuire asked that the TCL&P Board, staff and public observe a moment of silence out of respect for Zachary Adams, an employee of Trees, Inc., who passed away last week while working under contract for TCL&P.

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

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

- a. Minutes of the Regular Board Meeting of July 23, 2013.
- b. Joint Pole Attachment Agreement with Cherryland Electric Cooperative.
- c. Amendment to the Termination of Service Policy.

CARRIED unanimously.

**Items removed from the Consent Calendar**

None.

**Item 3 on the Agenda being Old Business**

None.

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

**4(a).** 2012 Renewable Energy Plan report and 2013 Biennial Plan filing.

The following individuals addressed the Board:

Jessica Wheaton, Marketing & Community Relations Coordinator

Public Comment regarding the 2013 Renewable Energy Biennial filing:

No one from the public commented.

**Item 5 on the Agenda being Appointments**

None.

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

A. From Legal Counsel.

None.

B. From Staff.

1. TJ Brown, Michigan Energy Options, provided an update on the Low Income Pilot Program.

The following individuals addressed the Board:

Jessica Wheaton, Marketing & Community Relations Coordinator

2. Tim Arends gave a report on the Utility Metrics summary.

C. From Board.

1. Jim Carruthers commented on the latest TCL&P bill insert.
2. Patrick McGuire corrected a statement made by Steve Smiley regarding the M-72 wind turbine during an interview with IPR on July 29, 2013.

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

No one from the public commented.

There being no objection, Chairman McGuire declared the meeting adjourned at 5:41 p.m.

/st


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Tim Arends, Secretary  
LIGHT AND POWER BOARD



TRAVERSE CITY  
LIGHT & POWER

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**To:** Light & Power Board  
**From:** Tim Arends, Executive Director   
**Date:** August 16, 2013  
**Subject:** Amended Grand Traverse Substation IFA

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Attached for your consideration is an Amended and Restated Interconnection Facilities Agreement (“GT IFA”) between TCL&P, Wolverine Power Supply Cooperative, Inc. (“Wolverine”), and Michigan Electric Transmission Company, LLC (“METC”) for the Grand Traverse Transmission Substation.

Wolverine and TCL&P entered into an agreement dated August 16, 1976 for the purposes, among others, of describing the general facilities, and the ownership thereof, of the Grand Traverse Substation, and establishing the respective obligations and rights of Wolverine and TCL&P with respect to the construction, operation and maintenance of the Grand Traverse Substation.

Wolverine and TCL&P jointly executed the Grand Traverse Substation Transformer and Bus Expansion Joint Project Agreement, dated March 23, 2002 for the purpose of expanding the Grand Traverse Substation by replacing transformers and related equipment and revising and restating those Parties interests in and rights and obligations to the Grand Traverse Substation.

METC, Wolverine and TCL&P replaced the Grand Traverse Interconnection Facilities Agreement dated August 1, 1998, with a new Grand Traverse Interconnection Facilities Agreement dated September 11, 2003 for the purposes of (a) describing the general facilities, and the ownership thereof, to be used in the Grand Traverse Interconnection and establishing the respective obligations and rights of each of the Parties with respect to procurement, installation, operation and maintenance of such facilities, and (b) describing other modifications and additions to METC's system that were necessary as a result of installing the facilities in the Grand Traverse Interconnection.

METC, Wolverine and TCL&P now desire to replace and amend the Grand Traverse Interconnection Facilities Agreement with this Agreement for the purposes, among others, of (a) describing Wolverine’s and TCL&P’s assumption of certain maintenance obligations currently performed by METC on Wolverine’s and TCL&P’s Connection Facilities, describing METC’s sale of the billing meters to Wolverine, and describing METC’s removal of the Remote Terminal Unit (“RTU”) and associated telecommunication equipment from the Grand Traverse Interconnection.

FOR THE LIGHT & POWER BOARD MEETING OF AUGUST 27, 2013

The North American Electric Reliability Corporation (“NERC”) is requiring utilities to meet specific reliability standards for operations, testing and maintenance of facilities, and to document that compliance. METC and Wolverine decided over two year ago to amend and restate IFA’s for 11 substations, with Grand Traverse substation being one of the eleven. The goal has been to clearly identify the owner of the facilities and clearly state who is responsible for the operation and maintenance of the facilities. Since TCL&P is a party to the agreement it is required to consent to any changes in the agreement between METC and Wolverine. The changes in the agreement are primarily between METC and Wolverine and have very little impact on TCL&P operations. If approved by all parties, the new Agreement will have to be submitted to FERC for its approval.

Staff recommends the Board approve the Amended and Restated GT IFA as presented. This item is appearing on the Consent Calendar as it is deemed by staff to be a non-controversial item. Approval of this item on the Consent Calendar means you agree with staff’s recommendation.

If any member of the Board or the public wishes to discuss this matter, other than clarifying questions, it should be placed on the “items removed from the consent calendar” portion of the agenda for full discussion.

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

**MOVED BY \_\_\_\_\_, SECONDED BY \_\_\_\_\_,**

**THAT THE BOARD AUTHORIZES THE CHAIRMAN AND THE SECRETARY TO ENTER INTO AN AMENDED AND RESTATED GRAND TRAVERSE INTERCONNECTION FACILITIES AGREEMENT WITH MICHIGAN ELECTRIC TRANSMISSION COMPANY, LLC AND WOLVERINE POWER SUPPLY COOPERATIVE, INC., SUBJECT TO APPROVAL AS TO SUBSTANCE BY THE EXECUTIVE DIRECTOR AND APPROVAL AS TO FORM BY GENERAL COUNSEL.**



**AMENDED AND RESTATED  
GRAND TRAVERSE INTERCONNECTION FACILITIES AGREEMENT  
BETWEEN MICHIGAN ELECTRIC TRANSMISSION COMPANY, LLC  
AND  
WOLVERINE POWER SUPPLY COOPERATIVE, INC.  
AND  
TRAVERSE CITY LIGHT AND POWER DEPARTMENT**

**AMENDED AND RESTATED  
GRAND TRAVERSE INTERCONNECTION FACILITIES AGREEMENT  
BETWEEN MICHIGAN ELECTRIC TRANSMISSION COMPANY, LLC  
AND  
WOLVERINE POWER SUPPLY COOPERATIVE, INC  
AND  
TRAVERSE CITY LIGHT AND POWER DEPARTMENT**

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**AMENDED AND RESTATED  
GRAND TRAVERSE INTERCONNECTION FACILITIES AGREEMENT  
BETWEEN MICHIGAN ELECTRIC TRANSMISSION COMPANY, LLC  
AND  
WOLVERINE POWER SUPPLY COOPERATIVE, INC  
AND  
TRAVERSE CITY LIGHT AND POWER DEPARTMENT**

This AMENDED AND RESTATED GRAND TRAVERSE INTERCONNECTION FACILITIES AGREEMENT, herein termed "Agreement", is made and entered into as of the \_\_\_\_ day of \_\_\_\_\_, 2013 by and among MICHIGAN ELECTRIC TRANSMISSION COMPANY, LLC, a Michigan Limited Liability Company, herein termed "METC," WOLVERINE POWER SUPPLY COOPERATIVE, INC., a Michigan corporation, herein termed "Wolverine," and TRAVERSE CITY LIGHT AND POWER DEPARTMENT, a Michigan municipal electric utility, herein termed "TCL&P." METC, Wolverine and TCL&P are sometimes referred to individually as "Party" and collectively as "Parties" where appropriate.

WHEREAS, METC (via assignment from Consumers Energy Company), Wolverine and TCL&P entered into a Grand Traverse Interconnection Facilities Agreement dated August 1, 1998, for the purposes, among others, of (a) describing the expanded general facilities, and the ownership thereof of the Grand Traverse Substation located in Garfield Township, Grand Traverse County, Michigan (collectively referred to herein as the "Grand Traverse Substation"), to be utilized in the Grand Traverse Interconnection (as defined below in this paragraph) and establishing the respective obligations and rights of the Parties with respect to procurement, installation, operation, and maintenance of the interconnection of certain 138 kV and 69 kV electric facilities known as the "Grand Traverse Interconnection"; and (b) describing other modifications and additions to METC's system that were necessary as a result of expanding the facilities in the Grand Traverse Interconnections; and

WHEREAS, Wolverine and TCL&P entered into an agreement dated August 16, 1976, together with Supplement No. 1 and Addendum thereto, both dated February 28, 1979, for the purposes, among others, of describing the general facilities, and the ownership thereof, of the Grand Traverse Substation, and establishing the respective obligations and rights of Wolverine and TCL&P with respect to the construction, operation and maintenance of the Grand Traverse Substation; and

WHEREAS, Wolverine and TCL&P jointly executed the Grand Traverse Substation Transformer and Bus Expansion Joint Project Agreement, dated March 23, 2002 ("Grand Traverse Joint Agreement"), for the purpose of: (i) expanding the Grand Traverse Substation by replacing transformers and related equipment; and, (ii) revising and restating those Parties interests in and rights and obligations to the Grand Traverse Substation;

WHEREAS, METC, Wolverine and TCL&P replaced the Grand Traverse Interconnection Facilities Agreement dated August 1, 1998, with a new Grand Traverse Interconnection Facilities Agreement dated September 11, 2003 ("Grand Traverse Interconnection Facilities Agreement") for the purposes, among others, of (a) describing the

general facilities, and the ownership thereof, to be used in the Grand Traverse Interconnection and establishing the respective obligations and rights of each of the Parties with respect to procurement, installation, operation and maintenance of such facilities, and (b) describing other modifications and additions to METC's system that were necessary as a result of installing the facilities in the Grand Traverse Interconnection; and

WHEREAS, METC, Wolverine and TCL&P now desire to replace and amend the Grand Traverse Interconnection Facilities Agreement with this Agreement for the purposes, among others, of (a) describing Wolverine's and TCL&P's assumption of certain maintenance obligations currently performed by METC on Wolverine's and TCL&P's Connection Facilities (as defined in Section 1.1), (b) describing METC's sale of the billing meters to Wolverine, and (c) describing METC's removal of the Remote Terminal Unit ("RTU") and associated telecommunication equipment from the Grand Traverse Interconnection.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein set forth, the Parties agree as follows:

## **SECTION 1. GRAND TRAVERSE INTERCONNECTION FACILITIES**

### **1.1 General**

The Parties have provided certain 138 kV and 69 kV electric facilities and associated appurtenances utilized in the connection of the Grand Traverse Substation jointly owned by Wolverine and TCL&P to METC's existing Boardman-Keystone #1 and Boardman-Keystone #2 138 kV transmission lines at the Grand Traverse Interconnection. The facilities comprising the Grand Traverse Interconnection are all located in Sections 34 and 35, Garfield Township, T27N, R11W, Grand Traverse County, Michigan. Such facilities and associated appurtenances shall include, but shall not be limited to, connection, transformation, switching, control, metering, telemetering, protective relaying equipment (such protective relaying equipment required by all Parties to protect each Party's system and its customers from electrical faults occurring on the other Parties' system or on the systems of others to which any Party is directly or indirectly connected) and any necessary additions or reinforcements by METC to METC's system required as a result of installing facilities for the Grand Traverse Interconnection. The 138 kV and 69 kV transmission lines, substation facilities and associated appurtenances, as described in Subsections 1.2, and 1.3 herein, are sometimes referred to herein as the "Grand Traverse Interconnection Facilities".

In the event future changes in either (i) design or operation of Wolverine's system, (ii) design or operation of TCL&P's system, (iii) Federal, state or local laws, regulations or codes, or (iv) design or operation of METC's system, later necessitate additional facilities or modifications to the then existing Connection Facilities as defined herein, the Parties shall undertake such additions or modifications as may be necessary. Before undertaking such future additions or modifications, the Parties shall consult, develop plans and coordinate schedules of activities so as to minimize interruptions to the Grand Traverse Interconnection. The cost of such future additions or modifications to the Grand Traverse Interconnection Facilities shall be borne by the Party or Parties requesting the additions or modifications, unless agreed otherwise at the time.

The ownership, operation and maintenance responsibilities for any such future additions or modifications shall be made consistent with the responsibilities allocated in this Agreement.

## **1.2 Wolverine's and TCL&P's Grand Traverse Interconnection Facilities**

1.2.1 Wolverine and TCL&P provided and installed, and jointly own (except for those METC Grand Traverse Interconnection Facilities stated in Subsection 1.3), facilities at the Grand Traverse Interconnection, which include but are not limited to the following, and as further described and agreed in their Grand Traverse Joint Agreement, or such other facilities as may be mutually agreed upon in writing:

- a. Termination facilities for 138kV circuit conductors, more particularly described in Subsections 1.2.1 (b), 1.2.1(c), and 1.2.1 (d), including two 138kV circuit switchers, each associated with a 138kV motor operated disconnect switch and two 90/120/150 MVA, 138/69 kV transformers;
- b. Two separate dead-end structures, insulators and connection hardware for termination of two separate 138kV lines provided by Wolverine and TCL&P pursuant to Subsection 1.2.1(c) and Subsection 1.2.1(d);
- c. Approximately 1620 feet of 336 ACSS 138 kV transmission line and supporting structures (and associated hardware, insulators, guys, anchors and ground wire) extending in a southerly direction from METC's dead-end transmission line pole in the Boardman-Keystone line #2 specified in Subsection 1.3.1 below to termination facilities specified in Subsection 1.2.1(a) above;
- d. Approximately 1765 feet of 336 ACSS 138 kV transmission line and supporting structures (and associated hardware, insulators, guys, anchors and ground wire) extending in a southerly direction from METC's dead-end transmission line pole in the Boardman-Keystone line #1 specified in Subsection 1.3.1 below to termination facilities specified in Subsection 1.2.1(a) above;
- e. Protective relaying and other protective equipment acceptable to METC to coordinate with similar facilities provided by METC at its Keystone Substation pursuant to Subsection 1.3.3, and located at the Keystone Substation Site described in Section 1.4;
- f. Relaying and/or telemetry, acceptable to METC, that prevents the parallel operation at the 69 kV level of the two 138/69 kV transformers located at Grand Traverse Substation;
- g. A substation control house with space inside that is suitable for the location and protection of the billing metering equipment;

- h. All facilities required to provide telemetry, as well as underground communication cables for exchange of relaying signals between relaying equipment located at Grand Traverse Substation and relaying equipment located at Keystone Substation;
  - i. 138 kV billing metering transformers and all electrical connections thereto;
  - j. One 69 kV, 6.0 MVAR switchable capacitor bank and one 69kV 12.0 MVAR switchable capacitor bank located at Grand Traverse Substation;
  - k. Billing metering equipment, including but not limited to watt-hour and var-hour meters; watt, var and voltage transducers and a telephone modem;
  - l. Telephone circuits for the billing meters provided pursuant to Subsection 1.2.1.k; and
  - m. Communication interface equipment and computer programming which will receive and process the telemetry signals from the Grand Traverse Interconnection to Wolverine's designated Energy Control Center.
- 1.2.2 Wolverine and TCL&P have coordinated with the telephone company for telephone service at the Grand Traverse Interconnection for a normal switched voice grade circuit for METC to meet the requirements set forth in Subsection 1.2.1., including telephone line isolation equipment installed by the telephone company.
- 1.2.3 Commencing on the effective date of this Agreement, Wolverine will provide information to METC (MW and Var hour pulses, MW and Var flows, voltages and breaker status) from each transformer bank provided by Wolverine and TCL&P.

### **1.3 METC's Grand Traverse Interconnection Facilities**

- 1.3.1 METC has provided, installed, owns, operates and maintains two 138 kV triple dead-end transmission line poles (and associated insulators, hardware, guys and anchors) in its existing Boardman-Keystone #1 and Boardman-Keystone #2 138 kV transmission lines. One said pole is pole number 9 located between pole number 8 and pole number 10 in Boardman-Keystone #2 line. The second pole is pole number 5 in the Boardman-Keystone #1 line.
- 1.3.2 Following the date of this Agreement, METC will remove the RTU and the associated telecom equipment. Wolverine will cooperate with METC in the removal of the RTU and the telecom equipment.
- 1.3.3 METC has provided, and owns appropriate protective relaying equipment at its Keystone Substation.

1.4 Intentionally deleted.

1.5 Intentionally deleted.

1.6 Intentionally deleted.

**1.7 Facilities Added in the Future**

If and when additional 138 kV facilities are added (i) to the Grand Traverse Substation by Wolverine and TCL&P or (ii) to the Boardman-Keystone #1 or Boardman-Keystone #2 138 kV transmission line by METC, it is agreed that the Party requiring the new facilities shall, at no cost to the other Party(ies), install (or cause to be installed) 138 kV facilities and/or protective relay systems that will provide for the isolation of any electrical faults that occur on the interconnected systems of either Wolverine and TCL&P or METC from having an effect on the other's interconnected system. The 138 kV facilities and/or protective relay systems shall be designed to fit into the electrical system configuration and shall be acceptable to each Party. METC and Wolverine and TCL&P agree that each will give advance notice to the other Parties of any such additions which it may contemplate making so as to assure the maximum practicable coordination of future system plans and the design of any necessary facilities.

**SECTION 2.**

Intentionally Deleted.

**SECTION 3. OPERATION AND MAINTENANCE**

**3.1 Operation and Maintenance by METC**

METC shall have sole authority and responsibility to operate and maintain METC owned Grand Traverse Interconnection Facilities required pursuant to Subsection 1.3 in accordance with the applicable standards of METC and prudent electrical practices.

**3.2 Operation and Maintenance by Wolverine and TCL&P**

Wolverine and TCL&P shall have sole authority and responsibility to operate and maintain the Wolverine and TCL&P jointly owned Grand Traverse Interconnection Facilities required pursuant to Subsection 1.2 in accordance with the applicable standards of Wolverine or TCL&P, as applicable, and prudent electrical practices.

**SECTION 4. CONNECTION POINT/METERING/TELEMETERING**

**4.1 Delivery Point**

The Point of Delivery shall be at the Grand Traverse 138 kV billing metering transformers provided pursuant to Subsection 1.2.1(i).

## **4.2 Metering**

Wolverine shall own the billing meters associated with the Grand Traverse Interconnection. Measurements of electric capacity and energy flow at the Grand Traverse Interconnection shall be made at 138 kV by standard types of electric meters installed. The standard electric meters shall be tested by Wolverine with a frequency not to be less than once every two (2) years. On request of METC or TCL&P, a special test may be made at the expense of the requesting party. Representatives of METC and/or TCL&P, as the case may be, shall be afforded the opportunity to be present at all routine or special tests and upon occasions when any readings, for purposes of settlements, are taken from meters not bearing an automatic record.

If any test of the meters shall disclose any inaccuracy exceeding two percent (2%), the accounts between METC and Wolverine, or METC and TCL&P for service delivered at the Grand Traverse Interconnection shall be adjusted to correct for the inaccuracy disclosed over the shorter of the following two periods: (1) for the thirty-day period immediately preceding the day of the test or (2) for the period that such inaccuracy may be determined to have existed, not to exceed six (6) months. Should the meters as provided for under this Section at any time fail to register, the electric capacity and energy delivered shall be determined by the Parties from the best available data.

Wolverine shall provide to the applicable Meter Data Management Agent (the "MDMA") and to those third parties that presently require such data to calculate network load (i.e., METC, TCL&P, and Consumers) direct dial-in, Ethernet, satellite or other data communication access to the billing metering data. The MDMA shall be responsible for reporting such data to the Midwest Independent Transmission System Operator, Inc.

Wolverine shall provide services associated with the metering, including preventive maintenance services; provided, however, that additional costs related to non-preventive maintenance that only benefit METC or TCL&P shall be METC's or TCL&P's responsibility.

## **4.3 Telemetry**

Certain telemetry facilities have been provided at the Grand Traverse Interconnection in accordance with the provisions of this Agreement. Wolverine shall own, operate and maintain said telemetry facilities.

Wolverine and METC will coordinate the RTU and telecom removal. Wolverine will ensure that, following the date of this Agreement, the existing telemetry being provided by METC will be covered by Wolverine's existing Supervisory Control and Data Acquisition ("SCADA") and Energy Control Center ("ECC") facility to allow Wolverine the Grand Traverse Interconnection control and monitoring.

## **4.4 Grand Traverse Interconnection Point**

The Connection Points, and the points of change in ownership between the Parties, shall be the points at which the METC 138 kV transmission lines provided pursuant to Subsection 1.3.1 connect to the 138kV transmission lines provided by Wolverine and TCL&P pursuant to Subsections 1.2.1(c) and 1.2.1(d) ("Grand Traverse Interconnection Point").

## **SECTION 5. SERVICE CONDITIONS**

### **5.1 Reactive Control**

METC and TCL&P shall endeavor to control the supply of kilovars so that the quantity flowing from any Party to another Party at the Grand Traverse Interconnection shall be as close to zero as possible. METC and Wolverine agree that as between them, they will comply with the terms of Settlement Agreement dated February 23, 2004, as amended, approved by the Federal Energy Regulatory Commission ("FERC"), in FERC Docket no. ER03-901-000.

### **5.2 Continuity of Service**

Each Party shall exercise reasonable care to maintain continuity of service in the delivery and receipt of electric capacity and energy as provided under this Agreement. If continuity of service becomes interrupted for any reason, the cause of such interruption shall be removed and normal operating conditions restored as soon as practicable. No Party shall be responsible to the other Parties for any damage or loss of revenue or other liability, damage or expense of any kind whatsoever, caused by or resulting from or in connection with any such interruption. Settlement of strikes and labor disturbances shall be wholly within the discretion of the Party having the difficulty.

## **SECTION 6. INDEMNITY; LIMITATION ON LIABILITY; FORCE MAJEURE**

### **6.1 Indemnity.**

Each Party shall at all times assume all liability for, and shall indemnify and save the other Parties harmless from, any and all damages, losses, claims, demands, suits, recoveries, costs, legal fees, and expenses for injury to or death of any person or persons whomsoever occurring on its own system, or for any loss, destruction of or damage to any property of third persons, firms, corporations or other entities occurring on its own system, arising out of or resulting from, either directly or indirectly, its own facilities, or arising out of or resulting from, either directly or indirectly, any electric energy furnished to it hereunder after such energy has been delivered to it by such other Party, unless caused by the sole negligence or intentional wrongdoing of any other Party.

### **6.2 Limitation on Liability.**

NO PARTY SHALL IN ANY EVENT BE LIABLE TO ANOTHER PARTY FOR ANY SPECIAL, INCIDENTAL, EXEMPLARY, PUNITIVE OR CONSEQUENTIAL DAMAGES SUCH AS, BUT NOT LIMITED TO, LOST PROFITS, REVENUE OR GOOD WILL, INTEREST, LOSS BY REASON OF SHUTDOWN OR NON-OPERATION OF EQUIPMENT OR MACHINERY, INCREASED EXPENSE OF OPERATION OF EQUIPMENT OR MACHINERY, COST OF PURCHASED OR REPLACEMENT POWER OR SERVICES OR CLAIMS BY CUSTOMERS, WHETHER SUCH LOSS IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, EVEN IF THE PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

**6.3 Force Majeure.**

IN NO EVENT SHALL ANY PARTY BE LIABLE TO ANOTHER PARTY FOR ANY ACT, OMISSION OR CIRCUMSTANCE OCCASIONED BY OR IN CONSEQUENCE OF ANY ACT OF GOD, LABOR DISTURBANCE, ACT OF THE PUBLIC ENEMY, WAR, INSURRECTION, RIOT, FIRE, ICE, STORM OR FLOOD, EXPLOSION, BREAKAGE OR ACCIDENT TO MACHINERY OR EQUIPMENT, CURTAILMENT, ORDER, REGULATION OR RESTRICTION IMPOSED BY GOVERNMENTAL, MILITARY OR LAWFULLY ESTABLISHED CIVILIAN AUTHORITIES OR BY THE MAKING OF NECESSARY REPAIRS UPON THE PROPERTY OR EQUIPMENT OF ANY PARTY HERETO, OR BY ANY OTHER CAUSE OR CAUSES BEYOND ANY PARTY'S REASONABLE CONTROL. NO PARTY SHALL BE REQUIRED TO SETTLE ANY STRIKE OR OTHER LABOR PROBLEM IN A MANNER NOT COMPLETELY SATISFACTORY TO IT.

**SECTION 7. SUCCESSORS AND ASSIGNS**

**7.1 Binding Effect**

This Agreement shall be binding upon and inure to the benefit of the successors and assigns of the respective Parties.

**7.2 Assignment**

No Party shall assign, transfer or otherwise alienate its interest in this Agreement in whole or in part without the prior written consent of the other Parties, and any attempted assignment without securing the consent of the other Parties shall be null and void, and of no force and effect. Such consent shall not be unreasonably withheld.

**SECTION 8. NOTICE TO PARTIES**

Unless otherwise provided in this Agreement, any notice, consent or other communication required to be made under this Agreement shall be in writing and shall be mailed by first class US mail, postage prepaid or delivered to the address set forth below or such other address as the receiving Party may designate in writing.

Michigan Electric Transmission Company, LLC  
27175 Energy Way  
Novi, Michigan 48377  
Attention: Daniel J. Oginsky, Senior Vice President and General Counsel

Wolverine Power Supply Cooperative, Inc.  
10125 West Watergate Road  
P O Box 229  
Cadillac, Michigan 49601-0229  
Attention: Eric D. Baker



Traverse City Light & Power  
1131 Hastings St.  
Traverse City, Michigan 49686  
Attention: Executive Director

All notices shall be effective when received.

#### **SECTION 9. GOVERNING LAW**

This Agreement shall be deemed to be a Michigan contract and shall be construed in accordance with and governed by the laws of Michigan, exclusive of its conflict of laws principles.

#### **SECTION 10. EFFECTIVE DATE, TERM AND TERMINATION**

This Agreement shall become effective on the first day of the month following the month in which the Agreement is accepted for filing and designated to become effective in accordance with its terms by the FERC, and shall remain in full force and effect until terminated, which may occur at any time by mutual agreement of the Parties or upon not less than sixty (60) months written notice given by any of the Parties hereto to the other Parties.

If Wolverine gives written notice of its desire to terminate this Agreement, METC and TCL&P shall meet to discuss appropriate changes to this Agreement that will allow the interconnection facilities to continue to function. Similarly, if TCL&P gives written notice of its desire to terminate this Agreement, METC and Wolverine shall meet to discuss appropriate changes to this Agreement that will allow the interconnection facilities to continue to function.

#### **SECTION 11. RETIREMENT**

At such time, before or after the Grand Traverse Interconnection is ready to be connected to METC's system, that the Grand Traverse Interconnection is no longer required by Wolverine and TCL&P, then the retirement of the facilities comprising the Grand Traverse Interconnection shall be the responsibility of the Party owning such facilities. Said retirement and removal of facilities shall be done as expeditiously as possible.

#### **SECTION 12. CANCELLATION OF EXISTING AGREEMENT**

This Agreement supersedes and cancels, as of the effective date hereof, the existing agreement entitled "Grand Traverse Interconnections Facility Agreement," dated September 11, 2003 among METC, Wolverine and TCL&P.

#### **SECTION 13. ENTIRE AGREEMENT, THIRD PARTIES AND AMENDMENTS**

With respect to the subject matter hereof, this Agreement supersedes all previous representations, understandings, negotiations and agreements either written or oral among the Parties or their representatives and constitutes the entire agreement of the Parties. This Agreement is intended for the benefit of the parties hereto and does not grant any rights to any

third parties unless otherwise specifically stated herein. No amendments or changes to this Agreement shall be binding unless made in writing and duly executed by all Parties. This Agreement may be executed in several counterparts, each of which may be deemed an original, and all of such counterparts together shall constitute one and the same Agreement.

[Remainder of Page Intentionally Left Blank; Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement.

**MICHIGAN ELECTRIC TRANSMISSION  
COMPANY, LLC**

By: ITC Holdings Corp., its Manager

By: \_\_\_\_\_  
Gregory Ioanidis, Vice President

**WOLVERINE POWER SUPPLY  
COOPERATIVE, INC.**

By: \_\_\_\_\_  
Eric D. Baker, President & CEO

**TRAVERSE CITY LIGHT AND POWER  
DEPARTMENT**

By: \_\_\_\_\_  
Name:  
Title:


By: \_\_\_\_\_  
Name:  
Title:

*[Signature Page to Amended and Restated Grand Traverse Interconnection Facilities  
Agreement]*



**TRAVERSE CITY  
LIGHT & POWER**

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**To:** Light & Power Board  
**From:** Tim Arends, Executive Director   
**Date:** August 19, 2013  
**Subject:** Amendment No. 2 Joint Use of Poles with Consumers Energy

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In March 2012 the board approved the East Hammond Substation Project Authorization Request for a new 138/69kV transmission substation connected to the ITC 138kV transmission system for the purposes of providing the reliability of another access point of transmission to the TCL&P system. This project also requires the construction of a new transmission line from the substation to the Parsons distribution substation. The project was originally approved with the transmission line connecting to an existing Consumers pole line down Four Mile Road to the railroad corridor, then constructing a new TCL&P owned pole line along the railroad corridor west into the Parsons substation.

Through the process of obtaining a permit from MDOT for the new pole line it was discovered that the line had to be placed 45' from the railroad centerline (or completely out of the railroad right of way); past experience has been that the line could be within 25' of the centerline. This change in requirements of MDOT would have placed the line within the back lot of many homes along that route that would have required extensive tree trimming/clearing. Considering the difficulty this would create for TCL&P in gaining easements, and the hardship of those property owners, TCL&P has negotiated with Consumers Energy in upgrading its existing transmission line through the area to accommodate TCL&P's needs. In addition, it allows Consumers Energy to upgrade its services that were in the planning stages.

This new agreement has distinct advantages to both utilities and provides a benefit to the entire community by eliminating the need for a new pole line that does not currently exist. Michael McGeehan, of GRP Engineering, Inc. will be available at your meeting to discuss in greater detail the specifics of the proposed agreement.

Staff recommends the Board approve the Amendment No. 2 to the license Agreement for the Joint Use of Poles between Consumers Energy Company and City of Traverse City. If the Board agrees with staff's recommendation the following motion would be appropriate:

**(MOTION ON FOLLOWING PAGE)**

FOR THE LIGHT & POWER BOARD MEETING OF AUGUST 27, 2013

**MOVED BY \_\_\_\_\_, SECONDED BY \_\_\_\_\_,**

**THAT THE BOARD AUTHORIZES THE CHAIRMAN AND SECRETARY TO ENTER INTO AN AMENDMENT NO. 2 TO THE LICENSE AGREEMENT FOR THE JOINT USE OF POLES BETWEEN CONSUMERS ENERGY COMPANY AND CITY OF TRAVERSE CITY; SUBJECT TO APPROVAL AS TO SUBSTANCE BY THE EXECUTIVE DIRECTOR AND APPROVAL AS TO FORM BY GENERAL COUNSEL; AND FURTHER AUTHORIZES PAYMENTS TO CONSUMERS ENERGY COMPANY AS REQUIRED IN THE AMENDMENT.**

**AMENDMENT NO. 2 TO THE  
LICENSE AGREEMENT  
FOR THE JOINT USE OF POLES  
BETWEEN  
CONSUMERS ENERGY COMPANY  
AND  
CITY OF TRAVERSE CITY**

**THIS AMENDMENT NO. 2** is made and entered into as of the \_\_\_\_\_ day of \_\_\_\_\_, 2013, between **CONSUMERS ENERGY COMPANY** (formerly known as Consumers Power Company), a Michigan corporation (successor by merger to Consumers Power Company, a Maine corporation), with offices at One Energy Plaza, Jackson, Michigan 49201 (the "**Company**"), and **CITY OF TRAVERSE CITY**, a Michigan municipal corporation, acting by and through its **Light and Power Department**, with offices at 1131 Hastings Street, Traverse City, Michigan 49684 ("**TCLP**").

The Company (under its prior name, Consumers Power Company) and TCLP entered into a License Agreement for the Joint Use of Poles dated July 1, 1964 (the "Agreement"), covering the joint use by both parties of each of their respective utility poles. The Company and TCLP also entered into an Amendment No. 1 to the Agreement, dated November 28, 2012. [Note: Throughout the original Agreement, the "shorthand" reference "the City" is used to refer to the City of Traverse City rather than "TCLP" as in Amendment No. 1 and as in this Amendment No. 2; it is expressly understood that no difference in the applicability or effectiveness of the provisions of the Agreement is intended.]

The Company and TCLP, each mutually confirming and acknowledging that the transactions and activities contemplated by Amendment No. 1 have not been performed either in whole or in any part by either party, intend and hereby agree that: (i) Amendment No. 1, and all undertakings, agreements, rights and obligations of the respective parties thereunder, is hereby canceled and declared null and void in its entirety; and (ii) the Company and TCLP are entering into this Amendment No. 2, and the undertakings, agreements, rights and obligations of the respective parties hereunder, in complete replacement for said Amendment No. 1.

**RECITALS:**

- I. **Article II(a)** of the Agreement limits the joint use of poles under the Agreement to poles:

". . . within the corporate limits of the City . . .";

and **Article II(c)** of the Agreement provides that:

"In no event shall both parties attach circuits to the same pole when such circuits are operated by both parties at voltages in excess of 15,000 volts."

- II. The Company owns an existing electric line, which includes both (a) a circuit operated by the Company at a nominal 46,000 volts and (b) an "underbuilt" circuit operated by the Company at a nominal 12,470 volts; which electric line is located along a Northerly-Southerly corridor next to (and on the Easterly side of) Four Mile Road as shown on **Attachment 1** to this Amendment No. 2. Said electric line, which is referred to herein as the "**Company's Hammond Road Line**", is located in East Bay Township, Grand Traverse County, Michigan.

The Company also owns an existing electric line, which includes both (a) a circuit that is currently operated by the Company at a nominal 12,470 volts but was designed to be and was formerly operated at a nominal 46,000 volts and may again in the future be operated by the Company at up to a nominal 46,000 volts and (b) an "underbuilt" circuit operated by the Company at a nominal 12,470 volts; which electric line runs in a generally (although not exclusively) Easterly-Westerly direction as also shown on said **Attachment 1** hereto. Said electric line, which is referred to herein as the "**Company's East Bay to Boardman-Acme Line**", is located primarily (if not

entirely) in East Bay Township, Grand Traverse County, Michigan, although a portion of it may possibly be within the corporate limits of the City of Traverse City.

TCLP desires to have joint use of the following poles of the Company:

- (i) the Company's poles that are part of the Company's Hammond Road Line beginning at a point approximately 1,300 feet Southerly of where the Company's Hammond Road Line crosses Hammond Road and ending at a point near where the Company's Hammond Road Line branches off to the Company's O-At-Ka Substation, the exact beginning and ending points being more specifically identified on **Attachment 1** hereto; and
- (ii) the Company's poles that are part of the Company's East Bay to Boardman-Acme Line beginning at Four Mile Road (on the Easterly side thereof) and ending approximately 0.42 miles Westerly of 3 Mile Road, the exact beginning and ending points also being more specifically identified on said **Attachment 1** hereto;

(the aforesaid poles, and any replacements thereof, being herein referred to as the "**Subject Company Poles**"). The wires with which TCLP desires to so jointly use the Subject Company Poles would consist of one (1) circuit (comprised of 3 wires) operated at a nominal 69,000 volts, and would have a configuration materially as shown on **Attachment 2** to this Amendment No. 2.

The Company would, on and subject to the terms and conditions of the Agreement, be willing to allow the above-specified joint use by TCLP of the Subject Company Poles. However:

- o the Company's Hammond Road Line is, as noted above, located in East Bay Township, outside the corporate limits of TCLP, and accordingly, such joint use would be inconsistent with the above-quoted restrictions of **Article II(a)** of the Agreement;
- o the Company's East Bay to Boardman-Acme Line is, as noted above, primarily (if not entirely) located in East Bay Township, outside the corporate limits of the City of Traverse City, and accordingly, such joint use would be inconsistent with the above-quoted restrictions of **Article II(a)** of the Agreement;
- o the Company, as noted above, operates one of the circuits on the Company's Hammond Road Line at a nominal 46,000 volts, and accordingly, if TCLP operates its circuit at a nominal 69,000 volts as noted above, the joint use of the Company's Hammond Road Line would be inconsistent with the above-quoted restrictions of **Article II(c)** of the Agreement; and
- o the Company, as noted, above, previously operated and in the future may again operate one of the circuits on the Company's East Bay to Boardman-Acme Line at a nominal 46,000 volts, and if the Company does so and if TCLP operates its circuit at a nominal 69,000 volts as noted above, the joint use of the Company's East Bay to Boardman-Acme Line would accordingly be inconsistent with the above-quoted restrictions of **Article II(c)** of the Agreement.

Therefore, an amendment to the Agreement would be needed to allow TCLP to have joint use of the Subject Company Poles.

- III. TCLP owns an existing electric line, which includes both (i) a circuit operated by TCLP at a nominal 69,000 volts and (ii) two "underbuilt" circuits each operated by TCLP at a nominal 13,800 volts, running in a generally Easterly-Westerly direction within the public road right-of-way of Parsons Road as shown on said **Attachment 1** hereto. Said electric line, which is referred to herein as "**TCLP's Parsons Road Line**", is located primarily (if not entirely) within the corporate limits of the City of Traverse City, although a portion thereof may possibly be in East Bay Township.

The Company desires to have joint use of TCLP's poles that are part of TCLP's Parsons Road Line beginning at a point approximately 0.42 mile Westerly of 3 Mile Road and ending at a point just Easterly of Airport Access Road, the exact beginning and ending points being more specifically identified on **Attachment 1** hereto (the aforesaid poles, and any replacements thereof, being herein referred to as the "**Subject TCLP Poles**"). The wires with which the Company desires to so jointly use the Subject TCLP Poles would be consist of two (2) circuits as follows: (i) one (1) circuit (comprised of 3 wires) operated at up to a nominal 46,000 volts and (ii) one (1) "underbuilt" circuit (comprised of 3 wires) operated at up to a nominal 12,470 volts; and would have a configuration materially as shown on **Attachment 2**.

TCLP would, on and subject to all terms and conditions of the Agreement, be willing to allow the above-specified joint use by the Company of the Subject TCLP Poles. However:

- o to whatever extent, if any, TCLP's Parsons Road Line might be located in East Bay Township, outside the corporate limits of the City of Traverse City, such joint use would be inconsistent with the above-quoted restrictions of **Article II(a)** of the Agreement; and
- o TCLP, as noted above, operates one of the circuits on TCLP's Parsons Road Line at a nominal 69,000 volts, and accordingly, if the Company operates one of its circuits at a nominal 46,000 volts as noted above, the joint use would be inconsistent with the above-quoted restrictions of **Article II(c)** of the Agreement.

Therefore, an amendment to the Agreement would also be needed to allow the Company to have joint use of the Subject TCLP Poles.

- IV. The parties desire to amend the Agreement, on certain terms and conditions as hereinbelow set forth, to, notwithstanding the above-quoted restrictions of **Articles II(a)** and **II(c)** of the Agreement, allow the joint use by TCLP of the Subject Company Poles referred to and described in Recital "II" above and the joint use by the Company of the Subject TCLP Poles referred to and described in Recital "III" above.

It is the express intent of the parties that this Amendment No. 2 does not commit either party to in the future allow any other or additional deviations whatsoever from the above-quoted restrictions of **Articles II(a)** and **II(c)** of the Agreement or from any other provisions of the Agreement, and neither party shall be in any way obligated to in the future agree to any other or additional deviations from said above-quoted restrictions of **Articles II(a)** and **II(c)** of the Agreement or from any other provisions of the Agreement; either:

- o in terms of any deviations whatsoever from the restrictions of said **Articles II(a)** and **II(c)** at or with respect to any locations additional to or other than the Subject Company Poles and the Subject TCLP Poles; or
- o in terms of any deviations from the restrictions of said **Articles II(a)** and **II(c)** with respect to the Subject Company Poles and the Subject TCLP Poles themselves additional to or other than as expressly provided for and authorized in this Amendment No. 2.

**NOW, THEREFORE**, the Company and TCLP agree as follows:

1. Notwithstanding the above-quoted restrictions of **Articles II(a)** and **II(c)** of the Agreement, the Company will allow TCLP the joint use of the Subject Company Poles with TCLP's nominal 69,000 volt wires in a configuration materially as shown on **Attachment 2** hereto.

Except for the deviations from the above-quoted restrictions of **Articles II(a)** and **II(c)** of the Agreement and except as otherwise provided in this Amendment No. 2, such joint use by TCLP of the Subject Company Poles shall be covered by and subject to all terms, conditions and



restrictions of the Agreement. Without limiting the generality of the foregoing, the parties expressly agree as follows in regard to the Subject Company Poles and joint use thereof:

- (a) The specifications attached hereto as **Attachment 2** shall, for purposes of the joint use of and each party's attachments on the Subject Company Poles, apply in lieu of the drawings referred to in **Article III** ("SPECIFICATIONS") of the Agreement. Otherwise, the requirements of said **Article III** ("SPECIFICATIONS") of the Agreement shall apply.
- (b) The Company shall have the sole right to determine which existing Subject Company Poles, if any, are adequate to allow for joint use by TCLP and which existing Subject Company Poles, if any, must be replaced to allow for joint use by TCLP.

Without limiting the generality of the immediately preceding subparagraph of this Item **1(b)**, it is expressly understood that in addition to having the right to choose to replace existing Subject Company Poles, the Company may at its sole option, along one portion of the route of the Company's East Bay to Boardman-Acme Line as identified on **Attachment 1**, also choose to relocate the route of the electric line as shown on said **Attachment 1**.

- (c) It is expressly understood, notwithstanding anything to the contrary in **Articles VII(a)** or **(b)** of the Agreement, that the Company shall be the owner of all Subject Company Poles -- regardless of whether existing poles are used for the joint use or whether existing poles are replaced to allow for the joint use. Any provisions of said **Articles VII(a)** or **(b)** (including without limitation any provisions of clauses **"(i)"** and **"(ii)"** of said **Article VII(a)**) that would result in TCLP being or becoming the owner of any Subject Company Pole (whether an existing pole or a replacement pole) shall have no application whatsoever.
- (d) In respect to the provisions of **Article VII(a)** of the Agreement that each party will own approximately 50% of all joint poles of each standard length, and in regard to the further provisions of **Article VII(a)** that if the establishment of joint use "unbalances the ownership of joint poles so that either party owns less than its proportionate share as specified above, arrangements shall be made for that party to erect and maintain new joint poles so as to maintain its proportionate share of ownership", it is expressly understood that the Subject Company Poles shall be entirely disregarded and excluded from consideration.
- (e) In the case of any Subject Company Pole(s) that the Company determines must be replaced to accommodate the joint use:
  - (i) TCLP shall not pay the Company for said replaced existing pole(s) in accordance with **Article VII(b)** of the Agreement (or **Schedule I** to the Agreement as is referenced in said **Article VII(b)**) but, instead, shall pay the Company for the full cost, as determined by the Company in accordance with the Company's then-usual accounting methods and procedures, of the work of removing said replaced existing pole(s) (and any associated guys or supports); it being further understood that said replaced pole(s) shall remain the Company's property; and
  - (ii) the Company will furnish and install the replacement pole(s) (and any associated guys or supports) and, notwithstanding any other provisions of the Agreement to the contrary, TCLP shall pay the Company for the full cost, as determined by the Company in accordance with the Company's then-usual accounting methods and procedures, of designing, furnishing and installing the replacement pole(s) (and any associated guys or supports).

It is expressly understood that the costs of the Company that are to be paid by TCLP pursuant to this Item **1(e)** are not necessarily limited strictly to costs immediately

connected with the specific and exact activities of removing replaced existing pole(s) (and any associated guys or supports) and designing, furnishing and installing the replacement pole(s) (and any associated guys or supports), but may also include costs of other activities of the Company reasonably necessary for and incidental to the foregoing, such as but not limited to costs of associated tree and brush clearing.

(f) Regardless of whether an existing Subject Company Pole or a replacement Subject Company Pole is used:

(i) TCLP shall, per **Article VII(c)** of the Agreement, place its own attachments thereon entirely at TCLP's own expense; and

(ii) the Company shall place, transfer and rearrange its own attachments thereon. However, notwithstanding any provisions of the Agreement, including without limitation the provisions of **Article VII(c)** of the Agreement, to the contrary, TCLP shall pay the Company for the full cost, as determined by the Company in accordance with the Company's then-usual accounting methods and procedures, of removing, placing, transferring and rearranging the Company's attachments as necessary for or in connection with creating and establishing the joint use. It is expressly understood that the costs of the Company that are to be paid by TCLP pursuant to this clause "(ii)" of this Item 1(f) are not necessarily limited strictly to costs immediately connected with the specific and exact activities of removing, placing, transferring and rearranging the Company's attachments, but may also include costs of other activities of the Company reasonably necessary for and incidental to the foregoing, such as but not limited to costs of associated tree and brush clearing.

After all of the respective parties' removal, placement, transfer and rearrangement work to initially establish the joint use of the Subject Company Poles has been completed, each party will, per **Article VII(c)** of the Agreement, be responsible for maintaining its own attachments at its own expense.

(g) With respect to the Company's costs that are to be paid by TCLP as provided in the preceding Item 1(e) and clause "(ii)" of the preceding Item 1(f) of this Amendment No. 2, the following payment provisions shall apply in lieu of the provisions of **Article XVI** ("Bills and Payment for Work") of the Agreement:

(i) Upon execution of this Amendment No. 2, TCLP shall pay to the Company fifty percent (50%) of the total amount that the Company estimates will be owing by TCLP to the Company pursuant to the provisions of said preceding Item 1(e) and said clause "(ii)" of said preceding Item 1(f). Said total amount that the Company so estimates will be owing by TCLP to the Company pursuant to such provisions is \$2,316,000.00; therefore, the fifty percent (50%) of such estimated total amount that is to be paid by TCLP to the Company upon execution of this Amendment No. 2 is \$1,158,000.00.

(ii) Upon the Company's commencement of actual work in the field pursuant to said preceding Item 1(e) and clause "(ii)" of said preceding Item 1(f), the Company shall notify TCLP thereof in writing and at the same time invoice TCLP for the remaining fifty percent (50%) of the aforesaid estimated total (i.e., for an additional \$1,158,000.00); and TCLP shall pay said amount to the Company within thirty (30) days after TCLP's receipt of such invoice.

(iii) After the Company has completed the applicable work, the Company will determine its actual total costs in accordance with the Company's then-usual accounting methods and procedures. If such actual total costs, as so

determined, are less than the estimated cost previously paid by TCLP to the Company pursuant to the immediately preceding clauses "(i)" and "(ii)" of this Item 1(g), then the Company shall refund the incremental amount to TCLP. If such actual total costs, as so determined, are greater than the estimated costs previously paid by TCLP to the Company pursuant to the immediately preceding clauses "(i)" and "(ii)" of this Item 1(g), then the Company shall issue a final invoice to TCLP for the incremental amount, which final invoice shall be paid by TCLP to the Company within thirty (30) days of TCLP's receipt thereof. The Company will, upon request of TCLP, provide TCLP with supporting details of the Company's computation of the actual total costs.

- (iv) All payments to the Company shall be made payable to Consumers Energy Company and shall be sent to Consumers Energy Company, Attention: Treasurer, One Energy Plaza, Jackson, Michigan 49201, or by wire transfer to a Company bank account or such other manner or at such place as the Company may designate by written notice to TCLP. Payments made by wire transfer shall reference the appropriate invoice number for which payment is being made.

Any payment not made on or before the due date shall bear interest, from the date due until the date upon which payment is made, at an annual percentage rate of interest equal to the lesser of (a) the prime rate published by the Wall Street Journal (which represents the base rate on corporate loans posted by at least 75% of the nation's banks) on the date due, plus 2%, or (b) the highest rate permitted by law.

2. Notwithstanding the above-quoted restrictions of **Articles II(a)** and **II(c)** of the Agreement, TCLP will allow the Company the joint use of the Subject TCLP Poles with the Company's nominal 46,000 volt wires in a configuration materially as shown on **Attachment 2** hereto.

Except for the deviations from the above-quoted restrictions of **Articles II(a)** and **II(c)** of the Agreement and except as otherwise provided in this Amendment No. 2, such joint use by the Company of the Subject TCLP Poles shall be covered by and subject to all terms, conditions and restrictions of the Agreement. Without limiting the generality of the foregoing, the parties expressly agree as follows in regard to the Subject TCLP Poles and joint use thereof:

- (a) The specifications attached hereto as **Attachment 2** shall, for purposes of the joint use of and each party's attachments on the Subject TCLP Poles, apply in lieu of the drawings referred to in **Article III** ("SPECIFICATIONS") of the Agreement. Otherwise, the requirements of said **Article III** ("SPECIFICATIONS") of the Agreement shall apply.
- (b) TCLP shall have the sole right to determine which existing Subject TCLP Poles, if any, are adequate to allow for joint use by the Company and which existing Subject TCLP Poles, if any, must be replaced to allow for joint use by the Company.
- (c) It is expressly understood, notwithstanding anything to the contrary in **Articles VII(a)** or **(b)** of the Agreement, that TCLP shall be the owner of all Subject TCLP Poles -- regardless of whether existing poles are used for the joint use or whether existing poles are replaced to allow for the joint use. Any provisions of said **Articles VII(a)** or **(b)** (including without limitation any provisions of clauses "(i)" and "(ii)" of said **Article VII(a)**) that would result in the Company being or becoming the owner of any Subject TCLP Pole shall have no application whatsoever.
- (d) In respect to the provisions of **Article VII(a)** of the Agreement that each party will own approximately 50% of all joint poles of each standard length, and in regard to the further provisions of **Article VII(a)** that if the establishment of joint use "unbalances the ownership of joint poles so that either party owns less than its proportionate share as specified above, arrangements shall be made for that party to erect and maintain new

joint poles so as to maintain its proportionate share of ownership", it is expressly understood that the Subject TCLP Poles shall be entirely disregarded and excluded from consideration.

- (e) In the case of any Subject TCLP Pole(s) that TCLP determines must be replaced to accommodate the joint use:
  - (i) the Company shall not pay TCLP for said replaced existing pole(s) in accordance with **Article VII(b)** of the Agreement (or **Schedule I** to the Agreement as is referenced in said **Article VII(b)**) but, instead, shall pay TCLP for the full cost, as determined by TCLP in accordance with TCLP's then-usual accounting methods and procedures, of the work of removing said replaced existing pole(s) (and any associated guys or supports); it being further understood that said replaced pole(s) shall remain TCLP's property; and
  - (ii) TCLP will furnish and install the replacement pole(s) (and any associated guys or supports) and, notwithstanding any other provisions of the Agreement to the contrary, the Company shall pay TCLP for the full cost, as determined by TCLP in accordance with TCLP's then-usual accounting methods and procedures, of designing, furnishing and installing the replacement pole(s) (and any associated guys or supports).
- (f) Regardless of whether an existing Subject TCLP Pole or a replacement Subject TCLP Pole is used:
  - (i) the Company shall, per **Article VII(c)** of the Agreement, place its own attachments thereon entirely at the Company's own expense; and
  - (ii) TCLP shall place, transfer and rearrange its own attachments thereon. However, notwithstanding any provisions of the Agreement, including without limitation the provisions of **Article VII(c)** of the Agreement, to the contrary, the Company shall pay TCLP for the full cost, as determined by TCLP in accordance with TCLP's then-usual accounting methods and procedures, of removing, placing, transferring and rearranging TCLP's attachments as necessary for or in connection with creating and establishing the joint use.

After all of the respective parties' removal, placement, transfer and rearrangement work to initially establish the joint use of the Subject TCLP Poles has been completed, each party will, per **Article VII(c)** of the Agreement, be responsible for maintaining its own attachments at its own expense.

- (g) With respect to TCLP's costs that are to be paid by the Company as provided in the preceding Items **2(e)** and **2(f)** of this Amendment No. 2, the following payment provisions shall apply in lieu of the provisions of **Article XVI** ("Bills and Payment for Work") of the Agreement:
  - (i) Upon execution of this Amendment No. 2, the Company shall pay to TCLP fifty percent (50%) of the total amount that TCLP estimates will be owing by the Company to TCLP pursuant to the provisions of said preceding Items **2(e)** and **2(f)**. Said total amount that TCLP so estimates will be owing by the Company to TCLP pursuant to such provisions is \$415,000.00; therefore, the fifty percent (50%) of such estimated total amount that is to be paid by the Company to TCLP upon execution of this Amendment No. 2 is \$207,500.00.
  - (ii) Upon TCLP's commencement of actual work in the field pursuant to said preceding Items **2(e)** and **2(f)**, TCLP shall notify the Company thereof in writing

and at the same time invoice the Company for the remaining fifty percent (50%) of the aforesaid estimated total incremental additional cost (i.e., for an additional \$207,500.00); and the Company shall pay said amount to TCLP within thirty (30) days after the Company's receipt of such invoice.

- (iii) After TCLP has completed the applicable work, TCLP will determine its actual total costs in accordance with TCLP's then-usual accounting methods and procedures. If such actual total costs, as so determined, are less than the estimated cost previously paid by the Company to TCLP pursuant to the immediately preceding clauses "(i)" and "(ii)" of this Item 2(g), then TCLP shall refund the incremental amount to the Company. If such actual total costs, as so determined, are greater than the estimated costs previously paid by the Company to TCLP pursuant to the immediately preceding clauses "(i)" and "(ii)" of this Item 2(g), then TCLP shall issue a final invoice to the Company for the incremental amount, which final invoice shall be paid by the Company to TCLP within thirty (30) days of the Company's receipt thereof. TCLP will, upon request of the Company, provide the Company with supporting details of TCLP's computation of the actual total costs.
- (iv) All payments to TCLP shall be made payable to Traverse City Light and Power Department and shall be sent to Traverse City Light and Power Department, Attention: Executive Director, 1131 Hastings Street, Traverse City, Michigan 49684, or by wire transfer to a Traverse City Light and Power Department bank account or such other manner or at such place as TCLP may designate by written notice to the Company. Payments made by wire transfer shall reference the appropriate invoice number for which payment is being made.

Any payment not made on or before the due date shall bear interest, from the date due until the date upon which payment is made, at an annual percentage rate of interest equal to the lesser of (a) the prime rate published by the Wall Street Journal (which represents the base rate on corporate loans posted by at least 75% of the nation's banks) on the date due, plus 2%, or (b) the highest rate permitted by law.

- 3. With respect, and only with respect, to the joint use of the Subject Company Poles and the joint use of the Subject TCLP Poles provided for in this Amendment No. 2, the following change shall apply to the provisions of **Article VIII** ("TERMINATION OF JOINT USE") of the Agreement:

In the event that a pole of the "Owner" becomes the property of the "Licensee" pursuant to the provisions of **Article VIII(a)** of the Agreement, the dollar amount to be paid by the "Licensee" to the "Owner" for said pole will not be in accordance with Schedule II to the Agreement (as is stated in said **Article VIII(a)**) but, instead, will be an amount equal to the net book value (plant-in-service less accumulated depreciation) of said pole as determined by the "Owner" in accordance with the "Owner's" then-usual accounting methods and procedures.

- 4. With respect, and only with respect, to the joint use of Subject Company Poles and the joint use of Subject TCLP Poles provided for in this Amendment No. 2, the following changes shall apply in respect to the provisions of **Article IX** ("LICENSE FEES") of the Agreement:

- (a) For TCLP's use of Subject Company Poles, TCLP shall pay to the Company, in lieu of the license fee amount of Nine Dollars (\$9.00) per pole per annum set forth in said **Article IX** of the Agreement, a fixed license fee amount of Fifteen Thousand Seven Hundred Fifty Seven Dollars (\$15,757.00) per each calendar year (or portion thereof) for so long as any use is made by TCLP of Subject Company Poles, beginning with calendar year 2014 and subject to annual escalation as the amount of said license fee as hereinafter provided.

Said license fee amount of Fifteen Thousand Seven Hundred Fifty Seven Dollars (\$15,757.00) that will be payable for calendar year 2014 as provided above shall be adjusted as follows: For each calendar year (or portion thereof), 2015 and thereafter, for so long as any use is made by TCLP of Subject Company Poles, said license fee shall be adjusted in accordance with the following formula:

$$ALF = BLF \times (\text{Index}_{\text{Adjusted}} \div \text{Index}_{\text{Base}})$$

where:

"ALF" means the adjusted amount of the license fee, which will be payable by TCLP for the applicable calendar year in question;

"BLF" means the original amount of license fee, being \$15,757.00 as set forth hereinabove;

$\text{Index}_{\text{Adjusted}}$  means the level of the Producer Price Index (PPI) for Electric Power Distribution (code 221122) as published by the United States Department of Labor, Bureau of Labor Statistics, for the month of July immediately preceding the start of the calendar year for which the adjusted amount of the license fee is being computed; and

$\text{Index}_{\text{Base}}$  means the level of the Producer Price Index (PPI) for Electric Power Distribution (code 221122) as published by the United States Department of Labor, Bureau of Labor Statistics, for the month of July, 2013, said level being 141.1(P).

P – Preliminary, subject to revision four months after original publication

In the event that the publication by the United States Department of Labor, Bureau of Labor Statistics, of the Producer Price Index (PPI) for Electric Power Distribution (code 221122) is at any time hereafter discontinued or rebased, then a substitute index or index base (as applicable), as reasonably selected by the Company, shall thereafter be used for annual license fee adjustments hereunder.

The Company will invoice TCLP on or about January 1, 2014 and on or about the beginning of each calendar year (or portion thereof) thereafter for so long as any use is made by TCLP of Subject Company Poles, for the applicable annual license fee amount as provided above, each of which invoices shall be paid by TCLP to the Company within thirty (30) days after TCLP's receipt thereof.

- (b) For the Company's use of Subject TCLP Poles, the Company shall pay to TCLP, in lieu of the license fee amount of Nine Dollars (\$9.00) per pole per annum set forth in said **Article IX** of the Agreement, a fixed license fee amount of Two Thousand Six Hundred Twenty Six Dollars (\$2,626.00) per each calendar year (or portion thereof) for so long as any use is made by the Company of Subject TCLP Poles, beginning with calendar year 2014 and subject to annual escalation as the amount of said license fee as hereinafter provided.

Said license fee amount of Two Thousand Six Hundred Twenty Six Dollars (\$2,626.00) that will be payable for calendar year 2014 as provided above shall be adjusted as follows: For each calendar year (or portion thereof), 2015 and thereafter, for so long as any use is made by the Company of Subject TCLP Poles, said license fee shall be adjusted in accordance with the same formula and provisions as are set forth in Item **4(a)** above (except only that the original amount of the license fee set forth in in this Item **4(b)**, i.e., \$2,626.00, will be used as "BLF" in said formula rather than the amount of the license fee set forth in Item **4(a)**).

TCLP will invoice the Company on or about January 1, 2014 and on or about the beginning of each calendar year (or portion thereof) thereafter for so long as any use is made by the Company of Subject TCLP Poles, for the applicable annual license fee amount as provided above, each of which invoices shall be paid by the Company to TCLP within thirty (30) days after the Company's receipt thereof.

5. As expeditiously as reasonably practicable after this Amendment No. 2 has been entered into, the Company and TCLP shall in good faith discuss and mutually agree in writing upon the schedule for the performance of their respective work and activities necessary to establish the joint use of the Subject Company Poles and the joint use of the Subject TCLP Poles as forth in Items 1 and 2 above of this Amendment No. 2. Each party shall, subject to delays due to causes beyond its reasonable control, perform its applicable work and activities in accordance with the mutually agreed upon schedule. Neither party shall have any liability to the other hereunder or arising herefrom for any special, indirect, incidental or consequential damages.

In all other respects, the terms and conditions of the Agreement remain unaffected.

**IN WITNESS WHEREOF**, the parties have executed this Amendment No. 2 as of the date first stated above.

CITY OF TRAVERSE CITY, acting by and through its Light and Power Department

CONSUMERS ENERGY COMPANY

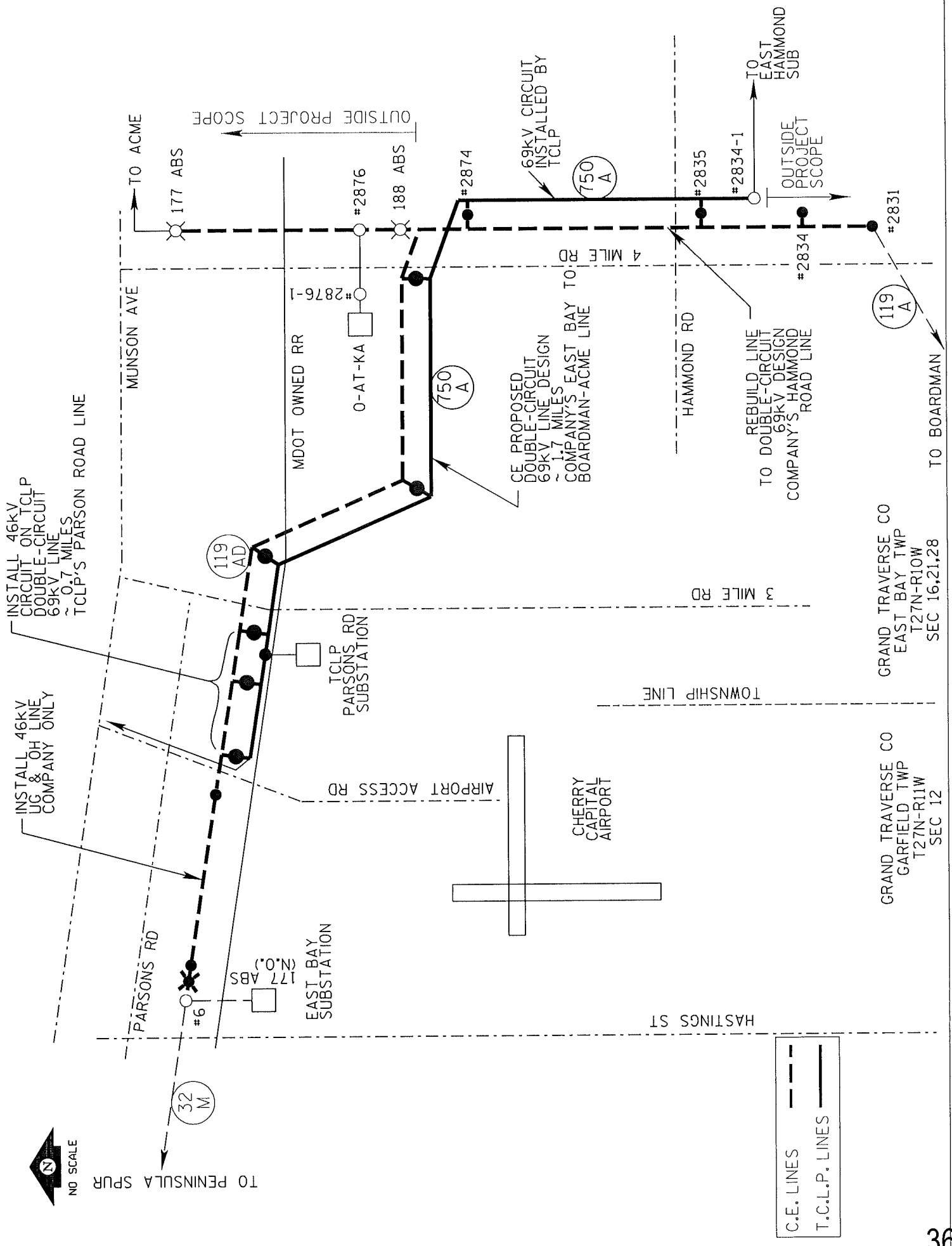
By: \_\_\_\_\_  
Patrick McGuire  
Title: Chairman

By: \_\_\_\_\_  
Garrick J. Rochow  
Title: Vice President of Energy Delivery

By: \_\_\_\_\_  
Timothy J. Arends  
Title: Executive Director

CECo Review and Approval		
Legal		
KA Rudolph		
JR Anderson		
SOX	n/a	

ATTACHMENT 1 - ONE LINE DIAGRAM



NO SCALE

TO PENINSULA SPUR

--- C.E. LINES  
 — T.C.L.P. LINES



REV#	DATE	DESCRIPTION	BY	APP

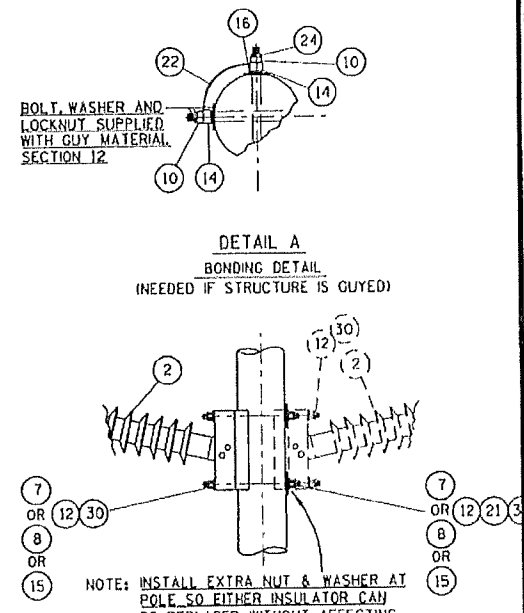
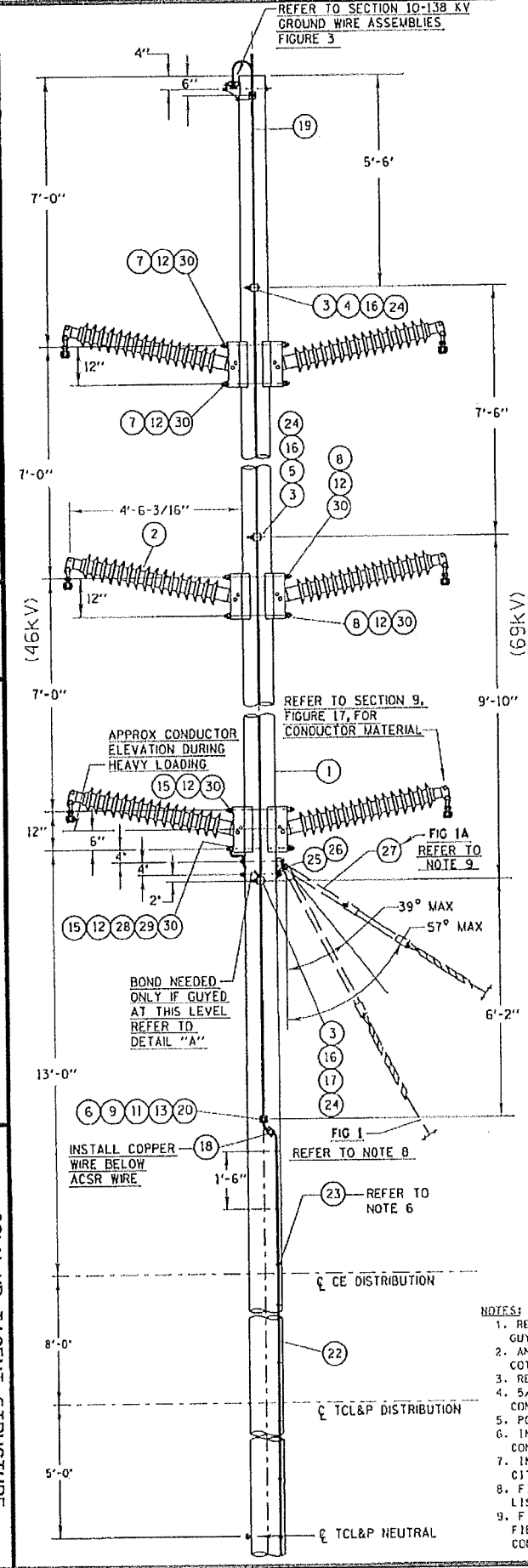
  

DATE	
BY	
APP	

FORM NO.	106900018-E
DATE	1
REV.	



ITEM No.	QTY REQ'D	DESCRIPTION	STOCK No.
1	1	POLE-ANSI 05.1 - REFER TO CONSTR LIST FOR CLASS	06-
2	6	138 KV POLY LINE POST INSULATOR, 1.5K MOC	01-89555
3	3	FIBERGLASS DOWN LEAD BRACKET, (PG 14-52)	01-07661
4	1	3/4" X 14" OR 16" GALV MACH BOLT	05-27440
5	1	3/4" X 16" OR 18" GALV MACH BOLT	05-27440
6	1	5/8" X 18" OR 20" GALV MACH BOLT	05-26962
7	2	7/8" X 24" OR 26" GALV DA BOLT	05-07459
8	2	7/8" X 26" OR 28" GALV DA BOLT	05-07475
9	1	SQUARE NUT FOR 5/8" BOLT	05-42274
10	2	SQUARE NUT FOR 3/4" BOLT	05-42282
11	1	5/8" SQUARE CONCAVE - 1/2" GALV LOCKNUT	05-42357
12	12	7/8" SQUARE CONCAVE - 1/2" GALV LOCKNUT	05-42373
13	2	2" SO GALV WASHER - 11/16" DIA HOLE	05-76629
14	2	1/2" GALV BONDING CLIP FOR 3/4" BOLT	05-77817
15	2	1/2" X 28" OR 30" GALV DA BOLT	05-07475
16	6	2 1/4" SO GALV WASHER - 13/16" DIA HOLE	05-76652
17	1	3/4" X 18" OR 20" GALV MACH BOLT	05-27465
18	1	PG CLAMP - *4 ACSR TO *5 COPPER	10-20114
19	-	*4 ACSR WIRE (DOWN LEAD)	08-30539
20	1	1/2" GALV BONDING CLIP FOR 5/8" BOLT	05-77809
21	6	4" SO GALV CURVED STUBBING WASHER 15/16" DIA HOLE	05-76759
22	-	*6 BARE SOLID COPPER WIRE (DOWN LEAD AND/OR BONDING)	08-32048
23	±2	1/2" GALV STAPLES (1-1/2")	07-88521
24	4	3/4" SQUARE CONCAVE - 1/2" GALV LOCKNUT	05-42365
25	1	3/4" X 2" GALV MACH BOLT WITH HEX NUT	05-22292
26	1	3/4" GALV LOCK PALNUT	05-41516
27	2	GALV EXTENSION STRAP PER ITEM 3 - L = 2'-0", (PG 12-61)	07-89882
28	1	1/2" GALV BONDING CLIP FOR 7/8" BOLT	05-77825
29	1	SQUARE NUT FOR 7/8" BOLT	05-42290
30	12	ELEC MATL, TYPE W-N DBL COL SPRNG LOCKWASHER - 15/16" DIA HOLE	05-91636

- NOTES:**
- REFER TO SECTION 12 DWG'S T10018783-E AND T10018786-E FOR STUB POLE, GUY AND ANCHOR INSTALLATION INSTRUCTIONS AND DETAILS.
  - ANY ITEM ASSEMBLED WITH A COTTER KEY IS TO BE INSTALLED SO THE COTTER KEY CAN BE INSPECTED FROM THE STRUCTURE.
  - REFER TO SECTION 13 DWG T10018750 FOR POLE SETTING DEPTH.
  - 5/16" GUY MATERIAL AND HARDWARE SHOWN FOR REFERENCE. REFER TO CONSTRUCTION LIST FOR REQUIRED GUYING.
  - POLE FRAMING AS PER SECTION 13 DWG T10018754, SH 1, ITEM S1.
  - INSTALL ADDITIONAL STAPLES AS REQUIRED TO MAKE GROUNDING WIRE CONFORM TO IRREGULAR SURFACES OF POLE.
  - INSTALL PLASTIC WELDING AT GROUND LINE ON PILES LOCATED ALONG CITY STREETS ONLY.
  - FIG. 1 - NO STRAPS ARE NEEDED ON GUYS UP TO 39 33/64". THE CONSTRUCTION LIST WILL SPECIFY FIG. 1 WHEN THIS TYPE OF GUY IS REQUIRED.
  - FIG. 1A - INSTALL (2) 2'-0" EXTENSION STRAPS (ITEM 27) BETWEEN FIBERGLASS GUY INSULATOR AND PLATE. IF GUY IS FROM 39" TO 57", THE CONSTRUCTION LIST WILL SPECIFY FIG. 1A WHEN THIS TYPE OF GUY IS REQUIRED.

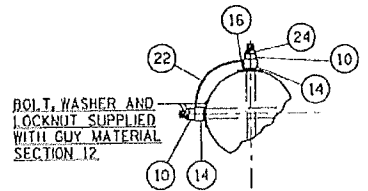
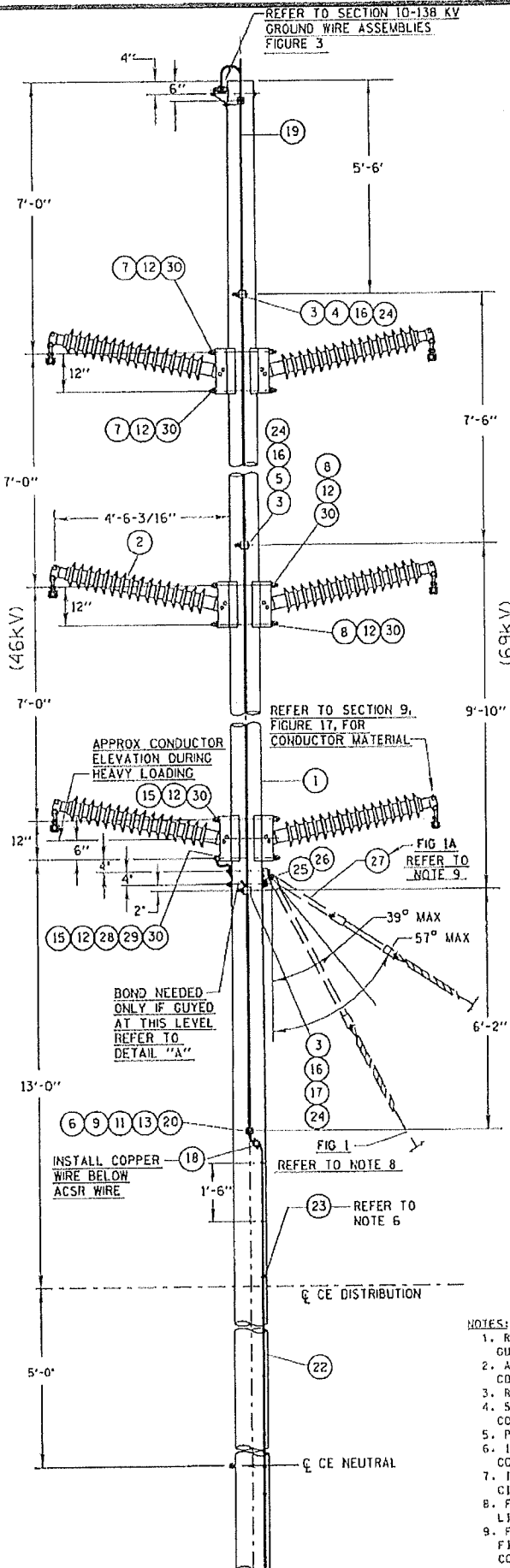
Consumers Energy  
 69kV HP TAGENT STRUCTURE  
 EXHIBIT A  
 PARSONS RD SUB TO 3 MILE RD

REV	DATE	DESCRIPTION	BY	APP

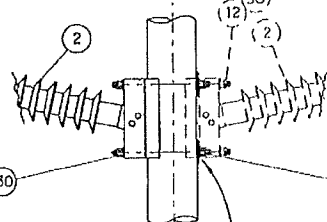
**Consumers Energy**

**69kV HP TAGENT STRUCTURE**  
EXHIBIT B  
3 MILE RD TO 4 MILE RD

FORM SCALE = 2/4  
PLOTING SCALE = 2.00  
1" = 2'-0"  
7/8  
T06900018-E  
1  
RS No. 56033



**DETAIL A**  
**BONDING DETAIL**  
(NEEDED IF STRUCTURE IS GUYED)

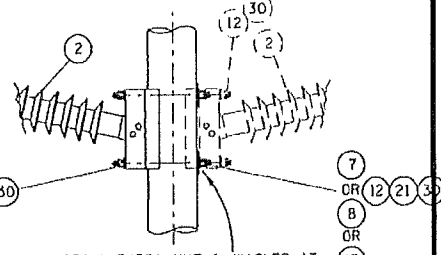
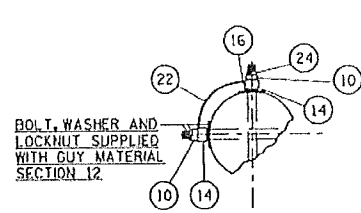
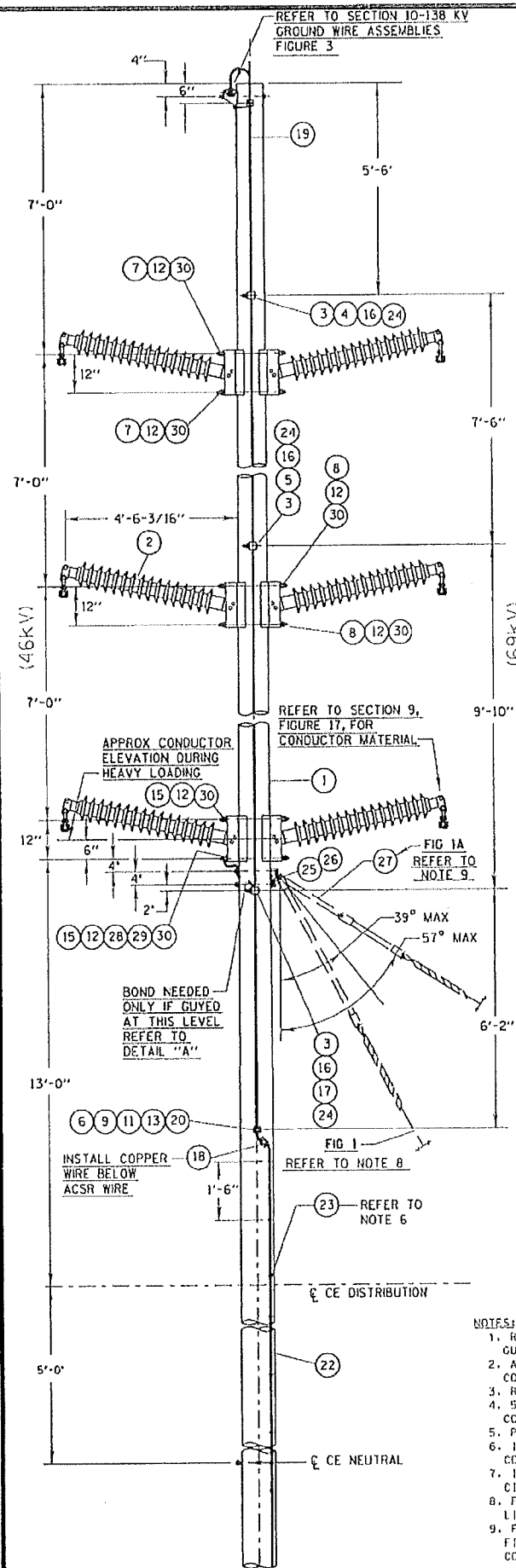


MATERIAL SHOWN FOR DOUBLE CIRCUIT LINES - WHERE ONLY ONE CIRCUIT IS INSTALLED ONLY THREE CONDUCTOR ASSEMBLIES. REFER TO WIRE ARRANGEMENT FOR CONDUCTOR POSITIONS AND CONSTRUCTION LIST FOR GUYING.

ITEM No.	QTY	DESCRIPTION	STOCK No.
1	1	POLE-ANSI 05.1 - REFER TO CONSTR LIST FOR CLASS	05-01-89555
2	6	138 KV POLY LINE POST INSULATOR, 1.5K MDC	07-07661
3	3	FIBERGLASS DOWN LEAD BRACKET, (PG 14-52)	05-27440
4	1	3/4" X 14" OR 16" GALV MACH BOLT	05-27465
5	1	3/4" X 16" OR 18" GALV MACH BOLT	05-26982
6	1	5/8" X 18" OR 20" GALV MACH BOLT	05-07467
7	2	7/8" X 24" OR 26" GALV DA BOLT	05-07475
8	2	7/8" X 26" OR 28" GALV DA BOLT	05-07467
9	1	SQUARE NUT FOR 5/8" BOLT	05-42274
10	2	SQUARE NUT FOR 3/4" BOLT	05-42282
11	1	5/8" SQUARE CONCAVE - MF GALV LOCKNUT	05-42357
12	12	7/8" SQUARE CONCAVE - MF GALV LOCKNUT	05-42373
13	2	2" SO GALV WASHER - 11/16" DIA HOLE	05-76629
14	2	GALV BONDING CLIP FOR 3/4" BOLT	05-77817
15	2	7/8" X 28" OR 30" GALV DA BOLT	05-07475
16	6	2 1/4" SO GALV WASHER - 13/16" DIA HOLE	05-76652
17	1	3/4" X 18" OR 20" GALV MACH BOLT	05-27465
18	1	PG CLAMP - 4 ACSR TO 4C COPPER	10-20114
19	1	*4 ACSR WIRE (DOWN LEAD)	08-305319
20	1	GALV CONDING CLIP FOR 5/8" BOLT	05-77809
21	6	4" SO GALV CURVED STUBBING WASHER 15/16" DIA HOLE	05-16159
22	-	*6 BARE SOLID COPPER WIRE (DOWN LEAD AND/OR BONDING)	08-32048
23	32 ±	GALV STAPLES (1-1/2")	07-88521
24	4	3/4" SQUARE CONCAVE - MF GALV LOCKNUT	05-42355
25	1	3/4" X 2" GALV MACH BOLT WITH HEX NUT	05-22292
26	1	3/4" GALV LOCK PALNUT	05-41516
27	2	GALV EXTENSION STRAP FOR ITEM 3 - L = 2'-0", (PG 12-61)	07-89982
28	1	GALV BONDING CLIP FOR 7/8" BOLT	05-77825
29	1	SQUARE NUT FOR 7/8" BOLT	05-42290
30	12	ELEC MTL TYPE W-W DBL COR. SPRNG LOCKWASHER - 15/16" DIA HOLE	05-51636

- NOTES:**
- REFER TO SECTION 12 DWG'S TLO018703-E AND TLO018786-E FOR STUB POLE, GUY AND ANCHOR INSTALLATION INSTRUCTIONS AND DETAILS.
  - ANY ITEM ASSEMBLED WITH A COTTER KEY IS TO BE INSTALLED SO THE COTTER KEY CAN BE INSPECTED FROM THE STRUCTURE.
  - REFER TO SECTION 13 DWG TLO018750 FOR POLE SETTING DEPTH.
  - 5/16" GUY MATERIAL AND HARDWARE SHOWN FOR REFERENCE. REFER TO CONSTRUCTION LIST FOR REQUIRED GUYING.
  - POLE FRAMING AS PER SECTION 13 DWG TLO018754, SH 1, ITEM 51.
  - INSTALL ADDITIONAL STAPLES AS REQUIRED TO MAKE GROUNDING WIRE CONFORM TO IRREGULAR SURFACES OF POLE.
  - INSTALL PLASTIC MOLDING AT GROUND LINE ON POLES LOCATED ALONG CITY STREETS ONLY.
  - FIG. 1 - NO STRAPS ARE NEEDED ON GUYS UP TO 39 33/64. THE CONSTRUCTION LIST WILL SPECIFY FIG. 1 WHEN THIS TYPE OF GUY IS REQUIRED.
  - FIG. 1A - INSTALL (2) 2'-0" EXTENSION STRAPS (ITEM 27) BETWEEN FIBERGLASS GUY INSULATOR AND PLATE, IF GUY IS FROM 39" TO 57". THE CONSTRUCTION LIST WILL SPECIFY FIG. 1A WHEN THIS TYPE OF GUY IS REQUIRED.

REV	DATE	DESCRIPTION
BY	APP	



MATERIAL SHOWN FOR DOUBLE CIRCUIT LINES - WHERE ONLY ONE CIRCUIT IS INSTALLED OMIT THREE CONDUCTOR ASSEMBLIES, REFER TO WIRE ARRANGEMENT FOR CONDUCTOR POSITIONS AND CONSTRUCTION LIST FOR GUYING

ITEM No.	QTY	DESCRIPTION	STOCK No.
1	1	POLE-ANSI 05.1 - REFER TO CONSTR LIST FOR CLASS	06-
2	6	138 KV POLY LINE POST INSULATOR, 1.5K MGC	01-89555
3	3	FIBERGLASS DOWN LEAD BRACKET, (PG 14-52)	07-07661
4	1	3/4" X 14" OR 16" GALV MACH BOLT	05-27424
5	1	3/4" X 16" OR 18" GALV MACH BOLT	05-27440
6	1	5/8" X 18" OR 20" GALV MACH BOLT	05-27465
7	2	7/8" X 24" OR 26" GALV DA BOLT	05-26962
8	2	7/8" X 26" OR 28" GALV DA BOLT	05-07459
9	1	SQUARE NUT FOR 5/8" BOLT	05-07475
10	2	SQUARE NUT FOR 3/4" BOLT	05-42282
11	1	5/8" SQUARE CONCAVE - MF GALV LOCKNUT	05-42357
12	12	7/8" SQUARE CONCAVE - MF GALV LOCKNUT	05-42313
13	2	2" SO GALV WASHER - 11/16" DIA HOLE	05-76679
14	2	GALV BONDING CLIP FOR 3/4" BOLT	05-77817
15	2	7/8" X 26" OR 30" GALV DA BOLT	05-07475
16	6	2 1/4" SO GALV WASHER - 13/16" DIA HOLE	05-16652
17	1	3/4" X 18" OR 20" GALV MACH BOLT	05-27465
18	1	PG CLAMP - *A ACSR TO *G COPPER	10-20114
19	4	*4 ACSR WIRE (DOWN LEAD)	08-30539
20	1	GALV BONDING CLIP FOR 5/8" BOLT	05-77809
21	6	4" SO GALV CURVED STIRRING WASHER 15/16" DIA HOLE	05-76769
22	-	*G BARE SOLID COPPER WIRE (DOWN LEAD AND/OR BONDING)	09-32048
23	32 ±	GALV STAPLES (1-1/2")	07-88521
24	4	3/4" SQUARE CONCAVE - MF GALV LOCKNUT	05-42365
25	1	3/4" X 2" GALV MACH BOLT WITH HEX NUT	05-22297
26	1	3/4" GALV LOCK PALNUT	05-41516
27	2	GALV EXTENSION STRAP PER ITEM 3 - L = 2'-0", (PG 12-6)	07-89302
28	1	GALV BONDING CLIP FOR 7/8" BOLT	05-77825
29	1	SQUARE NUT FOR 7/8" BOLT	05-42230
30	12	ELEC MAIL, TYPE U-W DRB COL SPRNG LOCKWASHER - 15/16" DIA HOLE	05-91636

- NOTES:
- REFER TO SECTION 12 DWG'S TLO018783-E AND TLO018786-E FOR STUB POLE, GUY AND ANCHOR INSTALLATION INSTRUCTIONS AND DETAILS.
  - ANY ITEM ASSEMBLED WITH A COTTER KEY IS TO BE INSTALLED SO THE COTTER KEY CAN BE INSPECTED FROM THE STRUCTURE.
  - REFER TO SECTION 13 DWG TLO018750 FOR POLE SETTING DEPTH.
  - 5/16" GUY MATERIAL AND HARDWARE SHOWN FOR REFERENCE. REFER TO CONSTRUCTION LIST FOR REQUIRED GUYING.
  - POLE FRAMING AS PER SECTION 13 DWG TLO018754, SH 1, ITEM S1.
  - INSTALL ADDITIONAL STAPLES AS REQUIRED TO MAKE GROUNDING WIRE CONFORM TO IRREGULAR SURFACES OF POLE.
  - INSTALL PLASTIC Moulding AT GROUND LINE ON PILES LOCATED ALONG CITY STREETS ONLY.
  - FIG. 1 - NO STRAPS ARE NEEDED ON GUYS UP TO 39 33/64 . THE CONSTRUCTION LIST WILL SPECIFY FIG. 1 WHEN THIS TYPE OF GUY IS REQUIRED.
  - FIG. 1A - INSTALL (2) 2'-0" EXTENSION STRAPS (ITEM 27) BETWEEN FIBERGLASS GUY INSULATOR AND PLATE, IF GUY IS FROM 39' TO 57'. THE CONSTRUCTION LIST WILL SPECIFY FIG. 1A WHEN THIS TYPE OF GUY IS REQUIRED.

69KV HP TAGENT STRUCTURE  
ALONG EAST SIDE OF 4 MILE RD  
EXHIBIT C

FORM SCALE = 24  
PLOTING SCALE = 2.00

SCALE 1" = 2'-0"  
DATE 7/3  
DRAWING NO. T06900018-E  
SHEET 1  
NO.

**GRP**  
Engineering, Inc.

PROJECT NAME  
**PARSONS ROAD TRANSMISSION LINE**

CLIENT  
TRAVERSE CITY LIGHT & POWER

**POLE ELEVATION (TYPICAL)**

GRP ENGINEERING, INC., GRAND RAPIDS / PETOSKEY, MI., 231-439-9683

DATE  
07-23-2013

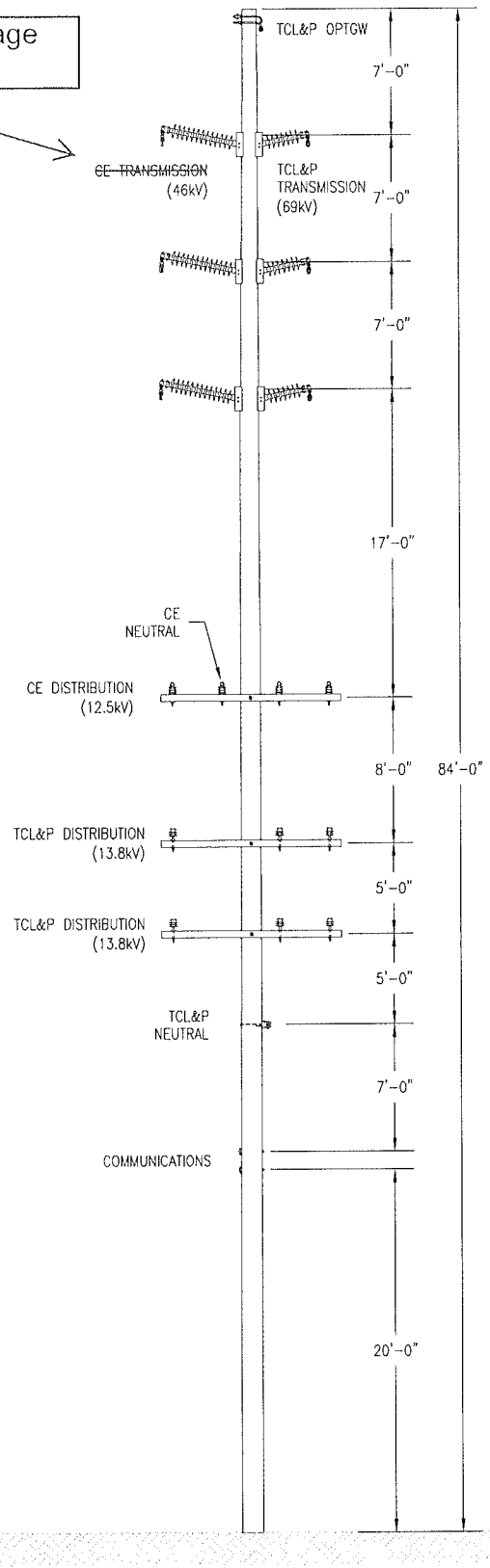
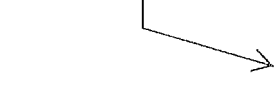
ENGINEER  
M/PM

DR. NAME  
K/MW

PROJECT NO.  
13-0595.01

DRAWING  
**ELEV**


CE High Voltage Distribution





**TRAVERSE CITY  
LIGHT & POWER**

---

**To:** Light & Power Board  
**From:** Tim Arends, Executive Director   
**Date:** August 16, 2013  
**Subject:** Engineering Services Proposal – East Side Transmission Line

---

Consumers Energy and Traverse City Light & Power Department (“TCL&P”) are currently working jointly on a transmission line rebuild project that will connect the new East Hammond Substation to TCL&P’s Parsons Substation. As explained in the prior agenda item, the change in route for the transmission line provided an opportunity for Consumers Energy to accelerate a planned project to upgrade its transmission line west of Parsons Substation (line owned by TCL&P) for the purposes of increasing reliability to its customers.

Attached for your consideration is a proposal from GRP Engineering, Inc. for design and construction inspection services related to the Parsons Rd 69kV Transmission Line Rebuild. The project estimate for this phase of the East Hammond Substation/Transmission Line Project is \$414,900. Professional design services will be a not-to-exceed amount of \$40,000, and construction inspection services will be a not-to-exceed amount of \$20,000. The total project cost including design and construction inspection services will be reimbursed by Consumers Energy.

Staff recommends the Board approve entering into an agreement with GRP Engineering, Inc. for professional engineering services related to this phase of the project. If the Board agrees with staff’s recommendation the following motion would be appropriate:

**MOVED BY \_\_\_\_\_, SECONDED BY \_\_\_\_\_,  
THAT THE BOARD AUTHORIZES THE EXECUTIVE DIRECTOR TO ENTER INTO  
AN AGREEMENT WITH GRP ENGINEERING FOR ENGINEERING DESIGN AND  
CONSTRUCTION INSPECTION SERVICES FOR THE PARSONS ROAD 69KV  
TRANSMISSION LINE REBUILD PROJECT AS OUTLINED IN ITS PROPOSAL  
DATED MAY 29, 2013; AND FURTHER AUTHORIZES THE EXECUTIVE DIRECTOR  
TO ADMINISTER WORK ORDERS AND AMENDMENTS AS REQUIRED IN THE  
BEST INTERESTS OF THE UTILITY.**

May 29, 2013  
13-0595.01

Mr. Tim Arends  
Traverse City Light & Power  
1131 Hastings Street  
Traverse City, MI 49686

**RE: Engineering Services Proposal  
Parsons Rd 69kV Transmission Line Rebuild**

Dear Tim:

GRP Engineering, Inc. is pleased to present this proposal to Traverse City Light & Power (TCL&P) for Engineering Services associated with the Parsons Road 69kV Transmission Line Rebuild project. We are uniquely qualified to provide these services for TCL&P through our project experience on TCL&P's system, our team's local presence, and the qualifications of all our personnel.

Project scope includes the reconstruction of 0.7 miles a 69kV transmission overhead line from Parsons Road Substation west along Parsons Road to Airport Access Road. The line is being reconstructed to facilitate the addition of a 46kV transmission circuit for Consumers Energy (CE.) The section of line will be jointly constructed with CE, but will be owned by TCL&P and designed by GRP Engineering, Inc. CE will reimburse TCL&P for all costs associated with the design, material procurement, construction, and inspection of this section of line. GRP Engineering will review with TCL&P costs to replace their 69kV conductor on this section of line to match larger conductor being utilized on all new 69kV line projects. If conductor is replaced, those additional costs would be borne by TCL&P.

Transmission line design will be based on traditional round and laminated wood poles, either #477 ACSR or #795ACSS conductor (see notes above) on linepost insulators, plus an overhead ground wire. Steel poles are not anticipated for this project.

Two material procurement contracts will be prepared including one for transmission conductor and overhead ground wire, insulators, and associated hardware, and the second will be for wood structures. Bids will be solicited for both traditional round wood poles and laminated wood poles to determine the most economical structures choice.

This proposal is separated into two distinct parts: Engineering Design services and Construction Inspection and Coordination. The Engineering Design services included in the proposal include detailed transmission line design, coordination with Consumers Energy, preparation of the two material procurement contracts, plus construction contract preparation, bid and award. Construction Inspection and Coordination services included in this proposal include construction staking of all structures, on-site representation at critical construction times, coordination meetings, and monthly progress reports.

#### Parsons Road 69kV Transmission Line Rebuild Engineering Design Phase

- Project administration (maintain correspondence & meeting minutes.)
- Project planning & control (design schedules, cost estimates, design summary report.)
- Project kickoff meeting and conceptual design review with TCL&P staff.
- Detailed transmission & distribution design engineering including both TCL&P and CE transmission conductors. All transmission line design will be completed in PLS-CADD and will meet current National Electric Safety Code (NESC) design requirements.
- Preparation of transmission construction drawings, including plan & profile and assembly drawings.
- Prepare and process two (2) material procurement contracts including wood poles, conductor, insulators, hardware, and overhead groundwire.
- Design review meetings with TCL&P and CE staff as required.
- Assistance with review of joint-use agreement with CE.
- Coordination with CE, East Bay Township, City of Traverse City, Grand Traverse County Road Commission, and the TART Trail.
- Meetings with affected property owners when requested by TCL&P.
- Preparation of one (1) construction contract plus assistance with bid and award.
- Printing & shipping of all required construction drawings sets.
- Prepare and process all required permit applications (e.g. FAA, GTCRC, City of Traverse City)
- Prepare all necessary contract close-out documents.
- Create assembly drawings in TCL&P 11"x17" format & determine required spare parts list.
- Provide record drawings including two (2) bound sets and files in AutoCAD 2013 format.

**GRP Engineering, Inc. will provide the Design Phase engineering services for the Parsons Road 69kV Transmission Line Rebuild for a lump sum fee of \$40,000 including expenses and all subcontracted services.**

#### Parsons Road 69kV Transmission Line Rebuild Construction Inspection Phase

- Attendance at TCL&P and CE project preconstruction meetings.
- Shop drawing review and approval for all procurement and construction contracts.
- Construction staking of all transmission and distribution structures.
- On-site representation during construction at critical times.
- Construction coordination between TCL&P, CE and the TART Trail, construction contractors, and other affected projects and parties.
- Preparation of monthly progress reports, which will include contractor performance and any work quality issues.

- Coordination and on-site representation during all transmission outages. Coordination meetings may include, but not be limited to, City of Traverse City, CE, WPCI, CEC, METC/ITC, & MISO.
- Process all contractor invoicing and change orders.
- Final inventory and inspection and preparation of punch lists and energization release forms for TCL&P's overhead 15kV & 69kV lines.

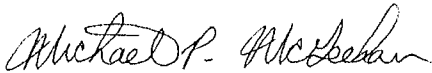
**GRP Engineering, Inc. will provide the Construction Inspection Phase services for the Parsons Road 69kV Transmission Line Rebuild on an hourly basis for a fee not to exceed \$20,000, including expenses.**

All services performed for Traverse City Light & Power within this scope will be billed on a monthly basis. Should additional services be required outside the scope of this proposal, GRP Engineering, Inc. will complete those tasks on an hourly basis via the attached rate sheet.

We appreciate the opportunity to submit this proposal and look forward to being of service to you. Please contact me should you have any questions regarding this proposal.

Sincerely,

**GRP Engineering, Inc.**



Michael P. McGeehan, P.E.  
President/Project Manager

Enclosures

cc/enc: Traverse City Light & Power  
Mr. Glen Dine



**GRP ENGINEERING, INC.**  
**HOURLY BILLING RATES**

Employee Title	Engineer	
	Level	Hourly Rate Range
Senior Project Manager	8	\$125 - \$150
Project Manager	7	\$105 - \$120
Senior Engineer	6	\$90 - \$105
Project Engineer	4 - 5	\$80 - \$90
Engineer	2 - 3	\$70 - \$80
Entry Level Engineer	1	\$50 - \$70
Engineering Technician		\$40 - \$50
Engineering Support		\$30 - \$43
Administrative Support		\$35 - \$50

Expenses will be invoiced at cost including, but not limited to, mileage, meals, lodging, printing and reproduction.

All subcontracted services will be invoiced at cost, with no additional markup.

Rates are valid through December 31, 2013

**TRAVERSE CITY LIGHT & POWER  
EAST HAMMOND 69kV TRANSMISSION LINE  
DOUBLE CIRCUIT - BETWEEN PARSONS SUB & AIRPORT ACCESS ROAD**

ITEM	ITEM DESCRIPTION	UNITS	LABOR	MATERIAL	TOTAL	EXTENDED TOTAL
1	90-H3 Pole	2	\$2,600.00	\$6,000.00	\$8,600.00	\$17,200
2	95-H3 Pole	11	\$2,800.00	\$6,250.00	\$9,050.00	\$99,550
3	100-H3 Pole	2	\$3,000.00	\$7,000.00	\$10,000.00	\$20,000
4	TP-69GB (Post) Tangent Top Assembly	13	\$650.00	\$1,200.00	\$1,850.00	\$24,050
5	TS-5G Large Angle/Deadend Assembly	2	\$1,250.00	\$2,000.00	\$3,250.00	\$6,500
6	TG-21AFI Guying	8	\$250.00	\$125.00	\$375.00	\$3,000
7	TA-2H Anchoring	8	\$250.00	\$200.00	\$450.00	\$3,600
8	Transmission Conductor Transfers	Lot	\$10,000.00	\$4,000.00	\$14,000.00	\$14,000
9	Distribution Conductor Transfers	Lot	\$20,000.00	\$10,000.00	\$30,000.00	\$30,000
10	Miscellaneous Overhead Construction	Lot	\$15,000.00	\$5,000.00	\$20,000.00	\$20,000
11	Site Work Restoration	LS	\$10,000.00	\$5,000.00	\$15,000.00	\$15,000
12	Topographic Survey	Lot	\$7,500.00	\$0.00	\$7,500.00	\$7,500
13	Railroad Monitoring	LS	\$30,000.00	\$0.00	\$30,000.00	\$30,000
14	Soil Borings & Environmental	Lot	\$6,500.00	\$0.00	\$6,500.00	\$6,500
15	Insurance, Bonding, Mobilization	Lot	\$0.00	\$22,000.00	\$22,000.00	\$22,000

Subtotal	\$318,900
Contingency (15%)	\$48,000
Design Engineering (10%)	\$32,000
Staking & Inspections (5%)	\$16,000
<b>Total Estimated Project Cost</b>	<b>\$414,900</b>

Notes:


1. All costs are estimated as 2013 construction costs.
2. Cost is based upon reconstruction of the 69kV pole line along the TART trail between Parsons Sub and Airport Access Road to a double circuit 46/69kV line with three distribution underbuild circuits.
3. No costs for CE transmission line post or conductor installation are included in the estimate.
4. Costs for new 69kV 795ACSS conductor is not included in this estimate.
5. The cost does not include any costs associated with easements.
6. The cost estimate submitted herein is based on time-honored practices within the construction industry. As such, the Engineer does not control the cost of labor, materials, equipment or a contractor's method of determining prices and competitive bidding practices or market conditions. The estimate contained represents our best judgment as design professionals using current information available at the time of preparation. The Engineer cannot guarantee that proposals, bids and/or construction costs will not vary from this cost estimate.

FOR THE LIGHT & POWER BOARD MEETING OF AUGUST 27, 2013



TRAVERSE CITY  
LIGHT & POWER

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**To:** Light & Power Board  
**From:** Jessica Wheaton, Marketing & Community Relations Coordinator   
**Date:** August 20, 2013  
**Subject:** Continuation of TC Saves Program

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Since 2011, when TC Saves was first introduced, Traverse City Light & Power (TCL&P) has played an active role in helping support the program. Now that the BetterBuildings for Michigan grant funds are no longer available, SEEDS and MLUI are looking to partner directly with TCL&P to continue to offer the program to TCL&P customers.

Attached is the proposal from SEEDS and MLUI that would support the continuation of TC Saves. This sweep, which would be the third overall sweep of the program, would target an additional 150 homes in TCL&P's service area through the summer of 2014, and include customer outreach, energy assessments, customer education, and data collection.

The BetterBuildings for Michigan grant spent approximately \$120,000 per year for this work. After reviewing TCL&P's board approved budget for PA295 Energy Optimization (EO) implementation, TCL&P has \$60,000 available (\$32,000 in 2013 and \$28,000 in 2014) to dedicate to the continuation of this successful program – see attached budget detail sheet. This money would be used to pay for the energy assessor's labor, SEEDS and MLUI staff time, and the hard costs for mailers, yard signs, etc. The third sweep would assist TCL&P in meeting the EO Residential Solutions goals for 2013 and 2014 under the sub-categories of Low Income Services, Residential Services (efficient lighting, appliance upgrades, etc.), and Education Services.

Sarna Salzman, Executive Director of SEEDS, and Brian Beauchamp, Policy Specialist at MLUI, will be in attendance to discuss their proposal and answer any questions the Board may have.

It is staff's recommendation to support the proposal for a third TC Saves sweep as it will benefit TCL&P's EO program in 2013 and 2014. If the Board is in agreement, the following motion would be appropriate:

**MOVED BY \_\_\_\_\_, SECONDED BY \_\_\_\_\_, THAT THE  
TCL&P BOARD SUPPORTS THE CONTINUATION OF THE TC SAVES PROGRAM  
FOR A THIRD SWEEP AND AUTHORIZES THE EXECUTIVE DIRECTOR TO  
ENTER INTO A STANDARD PROFESSIONAL SERVICE'S AGREEMENT IN THE  
AMOUNT OF \$60,000 WITH SEEDS AND THE MICHIGAN LAND USE INSTITUTE.**

**2013-14 EO Program Budget with TC Saves**

<b>Program Portfolio Residential Solutions</b>	<b>2013 Plan Filing</b>	<b>TC Saves</b>		<b>2014 Plan Filing</b>
	<b>Program Budget</b>	<b>2013 Program Budget</b>	<b>2014 Program Budget</b>	<b>Program Budget</b>
Low Income Services	\$ 4,533		\$ 5,000	\$ 4,602
Residential Services	\$ 76,086	\$ 27,000	\$ 18,000	\$ 90,346
Educational Services	\$ 7,526	\$ 5,000	\$ 5,000	\$ 8,044
Pilot Programs	\$ 12,544			\$ 13,407
<b>Total - Residential Solutions</b>	<b>\$ 100,689</b>	<b>\$ 32,000</b>	<b>\$ 28,000</b>	<b>\$ 116,399</b>

# A Proposal to Renew & Expand TC Saves

## 1. Introduction

Building on the success of the past two years serving homeowners in the Traverse City Light and Power service area, MLUI and SEEDS propose to continue work with TCLP and offer residential customers opportunities to participate in energy efficiency. The proposed set of outreach strategies are based entirely on two successful “sweeps” that made Traverse City a state-wide leader. It is critical to keep the momentum of this program and the TC Saves brand going while simultaneously working on developing longer term strategies and more robust partnerships that can provide even more comprehensive service. The proposed model will also amplify the outreach and rebate efforts of TCLP’s current Energy Optimization plan and advance TCLP’s record of leadership in energy efficiency and greenhouse gas emissions reduction.

Since the passage of Michigan’s Clean, Renewable and Efficient Energy Act (PA 295), Traverse City Light & Power has been extraordinarily successful in meeting and exceeding state requirements for energy efficiency. This leadership largely stems from TCLP’s pursuit of community-driven goals for cost-effective clean energy solutions.

To achieve this goal, however, TCLP must far exceed the state’s requirements in both energy efficiency and renewable energy. Clearly, there is great potential for much more energy efficiency work, both statewide and in Traverse City.

The Michigan Public Service Commission (MPSC) Baseline Study 2011 confirms that residents want to reduce energy use and energy costs, but are hampered by their lack of knowledge about ways to save energy and their perception of the cost of taking action<sup>1</sup>.

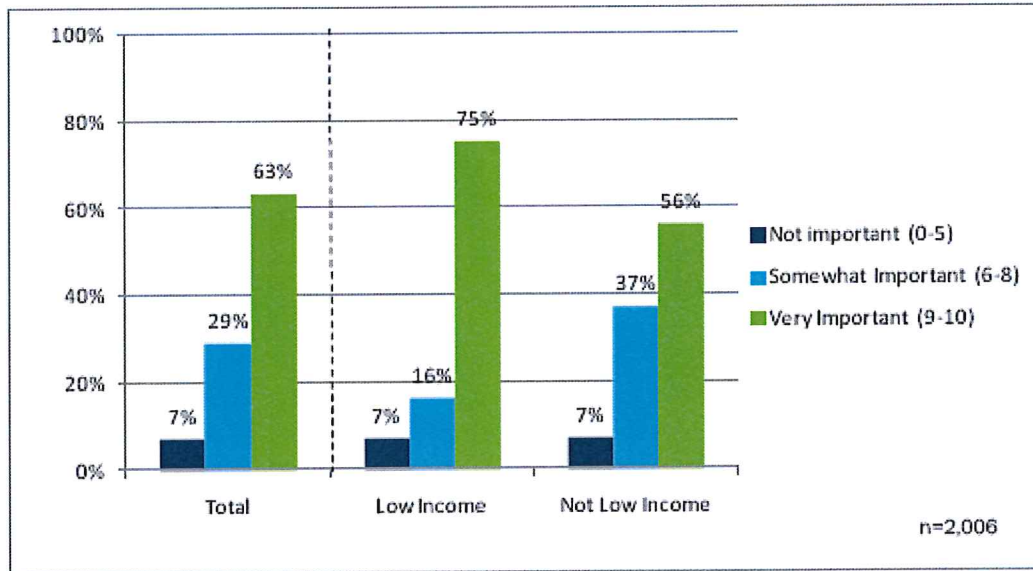
The MPSC Baseline Study examined the characteristics and energy efficiency (EE) needs of Michigan homes. It found that market saturation by even the most common, cost-effective energy efficiency strategies, such as compact fluorescent lights (CFLs), is still quite low. For example, in 2011 there was only 23% saturation by CFLs in the primary living spaces of an average Michigan home, and just 16% saturation throughout an entire average Michigan home.

Yet the study also found that homeowners and renters do indeed want to be more efficient. Nearly two-thirds of respondents considered saving energy to be very important, and 83% expected to try to reduce energy use in their homes. But only 37% were aware of their own utility’s energy efficiency campaigns and programs, and only 19% were confident in their knowledge of ways to save energy.

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<sup>1</sup> Cadmus Group. (2011, July) *Michigan Baseline 2011: Residential Energy Baseline Report*. Retrieved from [http://www.michigan.gov/documents/mpsc/Michigan\\_Residential\\_Baseline\\_Study\\_367668\\_7.pdf](http://www.michigan.gov/documents/mpsc/Michigan_Residential_Baseline_Study_367668_7.pdf)

**Figure 1: Importance of Saving Energy by Income Level**



**Source: Cadmus Group. (2011, July) Michigan Baseline 2011: Residential Energy Baseline Report**

Although respondents said their largest barrier to implementing EE was cost, only 22% felt that energy efficient products were generally out of their price range. This suggests that the *perceived value* of energy efficient equipment is a barrier.

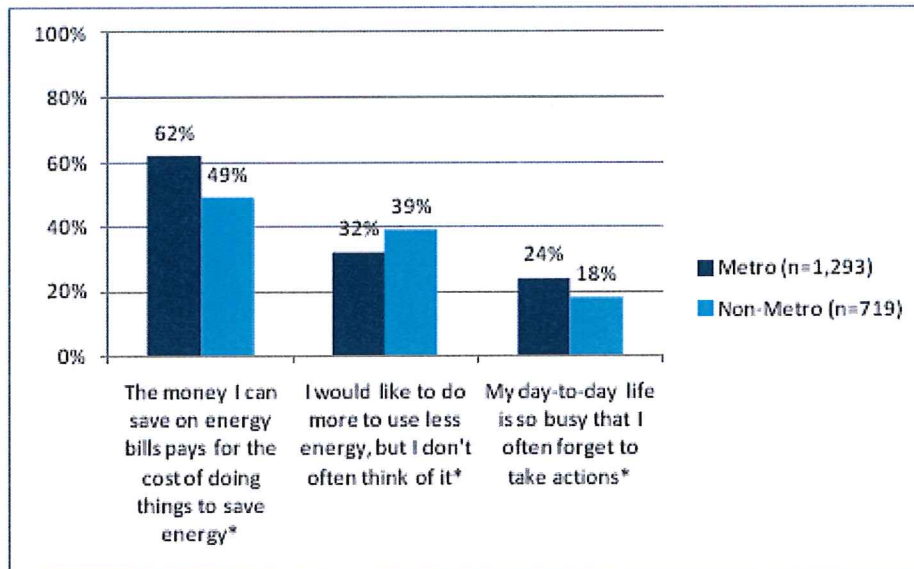
The survey also found that those with a high school education or less reported more barriers to achieving energy efficiency than those with more education. Better-educated respondents tended to be less affected by the cost of efficient products, their ability to compare those costs to the savings achieved, and knowing where to get help with energy efficiency.

These results indicate that, while there is interest and even readiness among Michigan residents to increase energy efficiency in their homes, product rebates and incentives only work when homeowners know that rebates and incentives are available to them, when they realize that they stand to benefit from significant EE investments *and* when they understand that the rebates and incentives make their investments in EE even more sound.

Many of these findings have been mirrored or alluded to recently at the local level on surveys conducted by TCLP and the Grand Vision.



**Figure 2: Attitudes Regarding Energy Efficiency Barriers, Perceptions, and Motivations (% Strongly Agree)**



\* Indicates that the difference is statistically significant at the 90 percent confidence level.

**Source: Cadmus Group. (2011, July) Michigan Baseline 2011: Residential Energy Baseline Report**

As you know, TCLP’s successful efficiency strategy has centered on its Energy Smart Program that features incentives and services for residential and business customers. To date, TCLP’s residential customers have received incentives for purchasing or upgrading to more efficient lighting, refrigeration, and HVAC units.

TCLP’s current residential Energy Optimization Plan offers weatherization assistance to low-income households, education about and incentives for high-efficiency products and appliance recycling, and general EE education. These strategies target both supply-side and demand-side stakeholders, including residents, retailers, and equipment installers.

However, the 2011 Baseline Study and experience indicate that incentives and general outreach are not enough to overcome the barriers to reaching TCLP’s ambitious energy efficiency goals.

TCLP’s current implementation strategy is not designed or meant to inform individual residential customers with clear analyses of their specific household energy savings opportunities, potential for rebates and opportunities for project financing.

This is the critical difference that the Better Buildings for Michigan program – locally known as TC Saves – experimented with across the state. Analysis of this recently completed program is showing that, using a trusted and skilled third-party “coach”, direct one-on-one matching of individual households with verified implementation contractors can:

- Achieve an attractive economy of scale for EE program administrators, residential energy contractors, and energy project financiers, and
- Change the perceived norm on investing in EE.

## 2. Objectives

This proposal builds on an understanding of the current market values coupled with best practices, specifically the proven successes of TC Saves and its associated pilot programs that delivered personalized, high-quality, whole-home energy assessments along with financing, rebates, and incentives assistance. This strategy incentivized over 550 homeowners to assess their home performance and, of those, 10% chose immediately to invest in significant efficiency upgrades. Our contractors feel certain that more will continue to invest over time as these are not inexpensive measures and must be carefully budgeted by the homeowner.

We propose to embark on a third TC Saves program “sweep” and to get another 150 homes professionally assessed by August 1, 2014. The proposed work plan will also support Traverse City Light and Power in meeting both its mandated and strategic Energy Optimization goals. Other objectives include:

1. Maintaining “TC Saves” as the City’s trusted brand to provide homeowners with energy savings and improved comfort.
2. Improve awareness and homeowner support for all of TCLP’s programs.
3. Supporting the growth and development of a local economy around energy efficiency - creating jobs, saving energy and saving money.
4. Maintain a pool of vetted and approved TC Saves contractors – contractors homeowners can trust to deliver high quality performance and customer service.
5. Leveraging other revenue streams to increase the capacity and sustainability of the brand and the program. Examples of other revenue sources include Michigan Saves financing, contractor referral dollars, private foundation funding, other utility investment, other lender investment, Department of Energy funds, and local private investments.

We know that this program works: It uses a proven approach and integrates years of analysis of energy efficiency programs with effective state and local partnerships. With TCLP’s support, TC Saves will gain even more recognition as a national leader in delivering residential energy efficiency.

## 3. Work Plan

### Key Components

Key components of this plan include

- Trusted coordinators who provide personalized handling and oversight of the relationship between all parties – honest brokers who coach homeowners through the process from signup through implementation. In this case, SEEDS and MLUI, local non-profit organizations with energy efficiency related missions and proven experience in this project format as well as effective outreach communications.
- Highly qualified contractors who are vetted by responsible parties and subject to third-party quality assurance evaluations. All contractors must become Michigan Saves Advanced Contractors and have BPI credentials.
- Documentation and Evaluation based on factual quantitative savings information in order to continue to understand and refine the program as well as report on stated community and industry goals.



## Process

This plan uses the same, systematic, house-by-house sweep strategies that are now proven, as demonstrated by successful EE programs around the country<sup>2</sup>, including Traverse City. The Better Buildings for Michigan program team achieved its goal of completing over 11,000 home energy assessments in Michigan, 550 of which were completed in Traverse City and continues to evaluate and share best practices.

The following is the proposed systematic approach based on successes achieved during the first two TC Save sweeps:

1. Contact homeowners. Word of mouth is the most successful form of outreach. Word of mouth is bolstered and encouraged in a number of ways including using the TC Saves brand, sending official letters from the City and TCL&P to every homeowner and providing easy participation through the TC Saves phone line and website [www.tcsaves.com](http://www.tcsaves.com).
2. Manage and coordinate homeowner sign ups. A TC Saves representative contacts all interested parties to personally explain the program and to schedule an assessment. This begins the coaching relationship. Homeowners must formally agree to release their utility data for two years in order to facilitate evaluation and reporting.
3. Assessment. A comprehensive whole-house energy assessment employs blower-door and thermal imaging to measure current energy use, loss and potential for improvement. During this home visit, workers perform all direct installs (e.g. CFLs and programmable thermostats) for immediate energy savings.
4. Consultation. The homeowner then receives a written report and personal consultation analyzing current energy use and a list of possible additional energy saving upgrades and their expected return on investment.
5. Upgrades. The homeowner is invited to take advantage of opportunities specific to their home and informed of existing financing mechanisms including -local and state lending institutions offering energy efficiency specific financing. Other special incentives can be matched with utility rebates, creating a unique and attractive financial package for the homeowner.
6. Data collection. Once work is completed, the project's parameters are entered into a database, allowing us to track real energy savings over time and provide reports. This quantitative data collection is coupled with qualitative data gathered about homeowner experience and satisfaction.

## Scope

While this proposal encompasses the process outlined above, its scope of support focuses on process numbers one, two and six. Assessment, consultation and upgrades are matching efforts supported by the authorized contractors and homeowner dollars.

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<sup>2</sup> The City of Holland, MI recently incorporated residential energy sweeps into their comprehensive community energy plan - Garforth International LLC. (2011, September) *Holland Community Energy Efficiency and Conservation Strategy*. Retrieved from [http://www.cityofholland.com/sites/default/files/fileattachments/final\\_cep\\_for\\_suscom\\_sept\\_9\\_2011\\_for\\_website\\_0.pdf](http://www.cityofholland.com/sites/default/files/fileattachments/final_cep_for_suscom_sept_9_2011_for_website_0.pdf)

#### **4. Community partners**

**City of Traverse City-** The City has provided staff time and administrative support for the first two sweeps. The endorsement of the City has been a critical motivator for homeowner interest.

**Chamber of Commerce-** The Chamber has been supportive of energy efficiency, setting goals with the Chamber Energy Task Force. In addition the Chamber recognizes the need for local contractors to evolve their business models to stimulate an economy around energy efficiency.

**TAAR-** TAAR provides opportunities to meet with Realtors and promotes the project.

**MI SAVES-** MI Saves is a program of Public Sector Consultants and provides free loan approval, coordination with banks, loan loss reserve guarantees and standards for contractors in order to participate.

**MI Energy Office and the MEDC-** MI Energy office, recently a department of the MEDC, procured the funding for Better Buildings for MI from The Department of Interior. The funding provides support for marketing, outreach, quality assurance and measurement and verification.

**Clean Energy Coalition-** The Clean Energy Coalition is the coordinator for all Better Buildings for Michigan non-entitlement (small) communities in the state assisting in utilizing best practices to implement effective programs. They continue to provide analysis of best practices.

#### **5. Current contractors**

James Anderson Builders

GeoFurnace

Michigan Energy Options

## **6. Proposal Team**

SEEDS and MLUI staff are experienced in managing research, outreach and design projects with a variety of partners, including state and local governments, schools, universities, for-profit corporations, non-profit organizations and community groups. MLUI and SEEDS partnered to create TC Saves and are trusted local, neutral nonprofit organizations well situated to continue to lead outreach for this program.

### **SEEDS: Ecology, Education, Design**

Since 1999, SEEDS has been using a triple-bottom-line approach to creating local solutions for global issues. We bring a holistic perspective, making connections between ecology, education and design. Understanding that all systems are interconnected, we frame our work into three categories: Energy & Environmental Analysis, Ecological Engineering and Extra-Ordinary Education. Our projects help communities make durable decisions about their own future. Learn more at [www.ecoseeds.org](http://www.ecoseeds.org)

### **Michigan Land Use Institute**

MLUI is a statewide non-profit organization that was founded in 1995. The Institute has an 11-member Board of Directors, 3,000 members, and 14 professional staff members working out of our headquarters in Traverse City. We educate key constituencies, decision-makers, and involved citizens with ways to support investments and policies that foster clean energy, sustainable food systems, and smart growth and urban planning.

## **7. Estimated Budget**

After discussing the available Energy Optimization budget with TCL&P staff, the proposed budget for this TC Saves sweep is \$60,000 which will include energy assessor's labor, SEEDS and MLUI staff time, and the hard costs such as yard signs, mailers, etc. The hard costs are estimated to be \$10,000 of the total budget.

## **8. Timeline**

The program is expected to begin September 1, 2013 with a strong outreach push during the autumn months and continuing until 150 homes have been signed up or until August 1, 2014, whichever comes first.

FOR THE LIGHT & POWER BOARD MEETING OF AUGUST 27, 2013



TRAVERSE CITY  
LIGHT & POWER

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**To:** Light & Power Board  
**From:** Tim Arends, Executive Director  
**Date:** August 20, 2013  
**Subject:** Strategic Planning Board Update



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On August 13<sup>th</sup> the Board began its strategic planning process working with Hometown Connections (“Hometown”) as its facilitator/trainer. The day consisted of an in-depth review of the strategic planning process including what role the board has in the process, and the role of the utility’s staff. The Board identified eight key strategic issues that the utility should be focused on in the short and long-term.

The following 1 ½ days was spent with TCL&P administrative staff and Hometown for very focused training on successful strategic planning processes, staff/employee’s role in preparing the Strategic Plan (“Plan”), and insights into successful implementation of the Plan once approved by the board. Staff also identified strategic issues it believed the utility needs to stay focused on in moving forward.

Attached are the Board identified issues and staff identified issues. As you can see, all staff issues were also strategic issues identified by the Board (the titles are slightly different, however). Staff believed that some of the Board issues were best captured within one or more of the other key issues already identified. In addition, Hometown recommended fewer main strategic issues for the Plan.

This memo/presentation is to seek input from the Board that staff is proceeding in a direction consistent with the expectations of the Board, as the board decides the ultimate direction of the utility. Is the Board comfortable with what staff has determined to be the top priorities for the utility?

Next steps are for staff to prepare strategy statements for each of the strategic areas and begin developing a list of tangible business goals or action items for each area. Hometown will return for a joint board and staff meeting in which staff will present each strategic issue and those action items for the Board’s consideration and input. In addition, Hometown will facilitate information gathering sessions from residential and commercial customer focus groups.





## **BOARD IDENTIFIED STRATEGIC ISSUES**

- Customer Satisfaction/Service
- Financial/Rates
- Power Supply
- Demand Side Management/Energy Efficiency
- Risk Management Enterprise
- Reliability
- Employee/Workforce
- Technology



## **STAFF IDENTIFIED STRATEGIC ISSUES**

- Power Supply
- System Reliability
- Financial Stability
- Customer Satisfaction
- Quality Workforce
- Technology



## Bay City Electric Light & Power

900 S. Water Street ★ Bay City, MI 48708 ★ (989) 894-8350 ★ Fax (989) 893-7121

Mr. Joe McElroy  
Directory of Safety  
Michigan Electric Cooperative Association  
2859 W. Jolly Rd  
Okemos, MI 48864

Dear Mr. McElroy:

I am proud to report that after having an additional 26 linemen the first two days and 22 linemen after the third day of the storm from various Municipal and Cooperative utilities throughout Michigan and including Bay City Electric Light & Power employee's crews worked a total of six days (6400 man hours) of storm restoration and incurred no known accidents / incidents.

We were pleased to have the assistance of Grand Haven, Great Lakes, Presque Isle, Sebawing, Traverse City, High Decker / Wolverine, and Thumb Electric. I was impressed with how safety conscious everyone was thanks to MECA's safety program that all entities participate in. All of the linemen from outside utilities acted with the utmost respect and professionalism during their time with us.

I would also like to take this opportunity to thank you, for your assistance in gathering the above entities in our time of need. I can honestly say that I completely understand and appreciate mutual aid in a situation such as ours.

Sincerely,

Mark Prevost  
Operations Superintendent

## Tim Arends

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**From:** Jack Segal <jackdsegal@yahoo.com>  
**Sent:** Tuesday, August 20, 2013 3:25 PM  
**To:** Tim Arends  
**Cc:** Katelyn Stroven; tcmanage@traversecitymi.gov  
**Subject:** Thanks

Dear Mr. Arends

Over the weekend, I misaddressed a request for repair of street lights on the north side of 6th Street to the city clerk's office. My assumption was that this was a City of TC issue. Ms. Stroven in the City Clerk's office promptly forwarded my request to your staff. I have been very impressed and pleased with the response.

A gentleman named "Brad" (sorry I didn't get his surname) called me and promised to investigate the problem. Shortly thereafter, I happened to see one of your vehicles in the neighborhood. Brad called back an hour later and reported the cause of the problem (disruption of one of your lines by an irrigation contractor) and assured me that it would be dealt with.

I want to thank you and the City of TC for this response. People tend to find fault with city services all the time, but my experience is that TCL&P and the city are doing a great job, and that TCL&P is keeping your customers informed, and is reaching out to the community. Many thanks, Jack Segal, 620 6th St.

Jack D. Segal  
Phone +1-(231)-421-5424  
Mobile +1-(231)-715-6300  
[jackdsegal@yahoo.com](mailto:jackdsegal@yahoo.com)

# TRAVERSE CITY AREA CHAMBER OF COMMERCE NEWS BULLETIN AUGUST 21, 2013



## JESSICA WHEATON IS NEW YP CHAIR

Jessica Wheaton was appointed by the Chamber board last week as Chair of the Chamber's Young Professionals organization, which provides networking, social, professional, and volunteer engagement opportunities for up-and-coming professionals in the Grand Traverse area.

Wheaton is also a graduate and active advisory council member of the Chamber's Leadership Grand Traverse program.

"The Young Professionals program provides a unique opportunity for like-minded, driven professionals to connect, share ideas and grow their careers through the connections made by participating in the program," she said. "I am honored to be selected as the 2014 chair and excited to continue to move the program in a successful direction."

Wheaton is the Marketing and Community Relations Coordinator for Traverse City Light and Power and has worked for the utility for five years. She oversees customer and media communications and outreach. She also implements the utility's energy efficiency programs for residential, commercial, and industrial customers, where she educates customers on simple ways to save energy and how to take advantage of the incentives offered to customers who become more energy efficient.

Prior to joining the team at TCL&P, she worked for the Traverse Health Clinic and Coalition. Wheaton has a bachelor's degree in Business Administration from Ferris State University and has a certificate in Energy Efficiency Management through the American Public Power Association. The Traverse City native serves on the Women's Resource Center's board of directors, sits on the Titan Excellence Endowment Fund committee and is a member of the Grand Vision Energy Network. She also co-founded an annual 5K run/walk in 2011 to create a greater awareness of domestic violence in the area. She has been named to the 2013 Traverse City Business News "40Under40" list.

Wheaton said she wants to expand on some of the new YP initiatives developed over the past year.

"In 2014 I hope to build upon the new programs introduced by the committee this year, like the YP Connect and Wingman programs, and really focus on developing the potential these programs hold to attract and retain high-level talent in the Traverse City community," she said.

Chamber officials praised outgoing YP Chair Warren Call of Huntington bank for his exceptional work as the YP Chair over the past year.

"Warren's commitment to the Chamber's Young Professionals program increased the impact, relevance and involvement of the YPs in the community," Chamber Chief Operating Officer Laura Oblinger said. "He put numerous hours into both YP and Chamber events and we're proud of and thankful for his service to the organization and the Traverse City area. Jessica will have some big shoes to fill."