

A REGULAR MEETING
Of The
TRAVERSE CITY LIGHT AND POWER BOARD

Will Be Held On

TUESDAY, February 12, 2013

At

5:15 p.m.

In The

COMMISSION CHAMBERS
(2nd floor, Governmental Center)
400 Boardman Avenue

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

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: 02-08-13
4:30 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.

None.

Items removed from the Consent Calendar

None.

3. Old Business

- a. Discussion and Board action concerning certain modifications to the Interim Executive Director's job description. (McGuire)

4. New Business

- a. Consideration of approving minutes of the Regular Meeting of January 22, and Special Meeting of January 29, 2013
- b. TCL&P South Substation Study. (Arends/GRP)

5. Appointments

None.

6. Reports and Communications

- a. From Legal Counsel.
- b. From Staff.
 1. 2nd Quarter Financial Report. (Arends)
 2. Budget Schedule. (Arends)

3. *TCL&P news and correspondence. (General – No Official Report)*
- c. From Board.
1. Executive Director Recruitment Ad Hoc Committee Update. (Verbal - Taylor)

7. Public Comment

/st

**TRAVERSE CITY LIGHT AND POWER
JOB DESCRIPTION**

TITLE: INTERIM EXECUTIVE DIRECTOR

The City Charter mandates basic duties of the Executive Director. Many of these are contained in Charter Sections 178 and 179.

General Summary:

Provide interim leadership for the Light and Power Department that provides stability to the operations with an ongoing focus in maintaining: the highest level of satisfaction and competitive rates for customers, a safe productive and motivated staff, the short-term and long-term strategic direction, a positive and cooperative relationship with all Light and Power stakeholders, and sound management of both human and fiscal resources.

Typical Duties:

1. Maintain an organizational climate that enables the Utility staff to be productive, motivated, and to work safely and cooperatively.
2. Assist the Board in carrying out its duties to establish policies that lead to excellence in: customer service, operational efficiency, and employee relations. After those policies are established, make sure they are implemented fairly and consistently in the Utility.
3. Prepare and present issues for Board consideration and action, including assistance with agenda preparation and keeping accurate record of Board proceedings.
4. Assure that the Utility's generation, transmission and distribution systems are operationally efficient, reliable and safe. Further, the Utility's purchased power must be reliable, competitively priced, and adequate to meet the future needs of all customers.
5. Demonstrate sound fiscal management including: budgeting, accounting, and control of utility assets.
6. Represent the Utility with all external agencies and regulatory bodies (i.e. Michigan Public Power Agency, Michigan Municipal Electric Association, American Public Power Association, Michigan Public Service Commission, OSHA, Environmental Protection Agency, Department of Natural Resources, etc.)
7. Complete, ~~with authorization of the City Manager,~~ the hiring, training, promotion and termination of Utility staff. Be directly responsible for the performance management and professional development of all directly reporting staff.

8. Supervise, and coordinate the activities of all existing external service providers to the Utility (i.e. legal, construction, professional services, etc.) ~~New contracts are subject to approval by the City Manager.~~
9. Work cooperatively within the city government framework, especially where other City Departments provide service to the Utility and where the Utility provides services to the City.
10. Assure that the activities provided on a contractual basis to other agencies are carried out effectively and efficiently. ~~New contractual arrangements are subject to City Manager approval.~~
11. Advise the Board Chairman when the need arises for a chief spokesperson for the Utility with media, customers, city government and other critical stakeholders.
12. Maintain and change, as needed, the organizational structure, reporting relationships, and job roles to achieve both staff job satisfaction and organizational effectiveness and efficiency. ~~subject to City Manager approval.~~
13. Perform other duties as may be assigned by the Light and Power Board.

**TRAVERSE CITY
LIGHT AND POWER BOARD**

Minutes of Regular Meeting
Held at 4:45 p.m., Commission Chambers, Governmental Center
Tuesday, January 22, 2013

Board Members -

Present: Barbara Budros, Jim Carruthers, John Snodgrass, Bob Spence, John Taylor, Patrick McGuire

Absent: Mike Coco

Ex Officio Member -

Present: R. Ben Bifoss

Others: Tim Arends, W. Peter Doren, Stephanie Tvardek, Glen Dine, Karen Fehr, Scott Menhart, Tom Olney, Rod Solak, Jessica Wheaton

The meeting was called to order at 4:45 p.m. by Chairman McGuire.

4:46 p.m. John Snodgrass joined the meeting.

There being no objection from the Board, Chairman McGuire amended the order of the agenda to consider "Reports and Communications" prior to "New Business".

As requested by Taylor, Agenda Item 2(c) was removed from the Consent Calendar for full discussion.

As requested by Mayor Michael Estes, Item 2(b), 2(d) and 2(e) were removed from the Consent Calendar for full discussion.

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 as amended, be approved:

- a. Minutes of the Special Meeting of December 18, 2012 and Regular Meeting of January 8, 2013.
- b. *Removed from the Consent Calendar.*
- c. *Removed from the Consent Calendar.*
- d. *Removed from the Consent Calendar.*
- e. *Removed from the Consent Calendar.*

CARRIED unanimously. (Coco, Spence absent)

Items removed from the Consent Calendar

- a. Minimum Cash Reserve Policy.

The following individuals addressed the Board:

Tim Arends, *Interim* Executive Director/Controller

Moved by Budros, seconded by Taylor, that the Light & Power Board adopts the Minimum Cash Reserve Policy as presented; and further establishes \$8,750,000 as the minimum cash reserve for fiscal year 2012-13.

CARRIED unanimously. (Coco, Spence absent)

b. Red Tag Revenue Distributions.

The following individuals addressed the Board:

Mayor Michael Estes, City of Traverse City

Tim Arends, *Interim* Executive Director/Controller

Jessica Wheaton, Marketing and Community Relations Coordinator

Moved by Budros to table consideration of authorizing red tag revenue distributions and form an ad hoc committee to study this issue and report to the Board with a recommendation.

W. Peter Doren clarified a motion to table is not necessary.

Moved by Budros, seconded by Carruthers, that the Board refer this item to a Red Tag Revenue Ad Hoc Committee and appoints Barbara Budros, Vice Chairman John Taylor and Chairman Pat McGuire to the Committee.

The following individuals from the Public addressed the Board:

Ed Rice, 1664 Strasbourg, non-ratepayer

CARRIED unanimously. (Coco, Spence absent)

c. National Cherry Festival Sponsorship.

The following individuals addressed the Board:

Mayor Michael Estes, City of Traverse City

Tim Arends, *Interim* Executive Director/Controller

5:15 p.m. Bob Spence joined the meeting.

No action taken.

d. G.T. Conservation District Sponsorship.

The following individuals addressed the Board:

Tim Arends, *Interim* Executive Director/Controller

No action taken.

It was the consensus of the Board to discuss sponsorship requests and the possibility of a policy at the next Regular Meeting.

Item 3 on the Agenda being Old Business

None.

Item 4 on the Agenda being Appointments

None.

Item 5 on the Agenda being Reports and Communications

A. From Legal Counsel.

None.

B. From Staff.

1. Rod Solak spoke regarding the APPA RP3 Award.

The following individuals addressed the Board:

Tim Arends, *Interim* Executive Director

2. Karen Feahr and Tom Olney gave an update on the M-72 wind turbine.

3. *TCL&P news and correspondence. (General – no official report)*

C. From Board.

1. Vice Chairman Taylor gave an update on the Executive Director Recruitment Ad Hoc Committee.

2. Chairman McGuire spoke regarding the upcoming board meeting schedule.

Item 6 on the Agenda being New Business

6(a). Presentation of the 2011-12 Fiscal Year Audit.

The following individuals addressed the Board:

Tim Arends, *Interim* Executive Director/Controller

Steve Peacock, Rehmann Robson

R. Ben Bifoss, City Manager

5:57 p.m. Chairman McGuire called the meeting to recess.

5:59 p.m. Chairman McGuire called the meeting to order.

Due to time constraints in the Commission Chambers, Chairman McGuire announced the Board would take Public Comment immediately following the presentation of the 2011-12 Fiscal Year Audit. Should the MPPA/MMEA presentation continue beyond 6:30 p.m., the meeting will reconvene in the Training Room.

Moved by Snodgrass, seconded by Budros, that the financial statements for the fiscal year ended June 30, 2012, be accepted.

CARRIED unanimously. (Coco absent)

Item 6 on the Agenda being Public Comment

Sherman Sherwood, 336 W. Tenth Street, Ratepayer

Item 7 on the Agenda being New Business (continued)

7(a). MPPA/MMEA presentations.

The following individuals addressed the Board:

Tim Arends, *Interim* Executive Director/Controller

Dave Walters, MPPA

Jim Weeks, MMEA

W. Peter Doren, General Counsel

6:30 p.m. R. Ben Bifoss departed the meeting.

6:31 p.m. Chairman McGuire reconvened the meeting in the Training Room.

6:57 p.m. Barbara Budros and Jim Carruthers departed the meeting.

7:26 p.m. Jim Carruthers rejoined the meeting.

No action taken.

There being no objection, Chairman McGuire declared the meeting adjourned at 7:28 p.m.

/st

Tim Arends, Secretary
LIGHT AND POWER BOARD

**TRAVERSE CITY
LIGHT AND POWER BOARD**

Minutes of Special Meeting
Held at 5:15 p.m., Commission Chambers, Governmental Center
Tuesday, January 29, 2013

Board Members -

Present: Barbara Budros, Jim Carruthers, Mike Coco, John Snodgrass, Bob Spence,
John Taylor, Patrick McGuire

Ex Officio Member -

Absent: R. Ben Bifoss

Others: Tim Arends, W. Peter Doren, Stephanie Tvardek, Karen Feahr, Scott
Menhart, Tom Olney, Jessica Wheaton

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

1. Presentation and discussion of Mary Grover interviews regarding the Executive Director and next steps in the search process.

The Board discussed the required and preferred qualifications of the new Executive Director.

The following individuals addressed the Board:

W. Peter Doren, General Counsel
Mary Grover, Consultant

The following individuals from the Public addressed the Board regarding the profile characteristics:

Ed Rice, 1664 Strasbourg, Non-Ratepayer
Rick Buckhalter, 932 Kelley Street, Ratepayer
Email to the Board from Greg Reisig, NMEAC, was read into the minutes

The Board continued to discuss options for the search process.

The following individuals addressed the Board:

W. Peter Doren, General Counsel

2. Public Comment

The following individuals from the Public addressed the Board:

Ed Rice, 1664 Strasbourg, Non-Ratepayer
Rick Buckhalter, 932 Kelley Street, Ratepayer

There being no objection, Chairman McGuire declared the meeting adjourned at 7:09 p.m.

/st

Tim Arends, Secretary
LIGHT AND POWER BOARD

DRAFT



To: Light & Power Board
From: Tim Arends, *Interim* Executive Director/Controller
Date: February 8, 2013
Subject: South Substation Study

Handwritten initials in blue ink, possibly "TA", located to the right of the "From:" line.

Following is an historical timeline as it relates to the South distribution substation project:

- December 6, 2011 TCL&P Executive Director entered into an option agreement to purchase 30 acres along LaFranier Road. Option expiration date 12-1-2012.
- February 14, 2012 regular meeting – TCL&P Board approved a project authorization request for a 69/13.8kv South Side Distribution Substation (vote: 6-0, one member absent).
- February 28, 2012 regular meeting – TCL&P Board authorized an agreement for professional engineering services to include design and construction management services (vote: 6-1)
- November 27, 2012 regular meeting – TCL&P Board authorized a six month extension on the 30 acre option agreement (vote: 6-1)

While the board has supported staff's recommendation to construct a new distribution substation by approving the project authorization request, the project has raised concerns regarding siting the new substation, as well as the need for the substation. This meeting is focused on addressing the need for a new distribution substation on the utility's South side due to loading/growth issues, and future reliability concerns. GRP Engineering, Inc. was hired to provide an independent evaluation of the TCL&P distribution system/circuit capacity issues before proceeding with this very important public project. Mr. Michael McGeehan, P.E., President of GRP Engineering, will be at the meeting to present the study to the board. The board packet contains just the Executive Summary, and Findings & Analysis. The full report is over 50 pages and includes graphs, maps, and distribution system detail information. If a board member would like the full report please let me know.

Further, I have asked Cherryland Electric's Engineering and Operations Manager, Frank Siepker Jr. P.E., to give an opinion on whether TCL&P is in need of a new distribution substation, and to address if energy optimization (EO) efforts could mitigate or delay the need for a new substation; based on Cherryland Electric Cooperative's EO experience. Mr. Siepker has prior experience with TCL&P's system as a private contractor for the utility from 1998 to 2003, and was the Project Engineer for the Hall Street Substation. His letter to the TCL&P Board is attached for your review.

FOR THE LIGHT & POWER BOARD MEETING OF FEBRUARY 12, 2013

Cherryland Electric will be in attendance to address any concerns you may have with the information they have provided.

As previously explained, I have structured three meetings in February for the board that are intended to provide the board with the information it needs to not only affirm its commitment to the project, but to assist the board in deciding the best location of a new substation. Since it has been one year since the board approved the project authorization request, I believe this presentation is a necessary first step before addressing the siting issue.

TRAVERSE CITY LIGHT & POWER

SOUTH SUBSTATION STUDY

DRAFT REPORT
FEBRUARY 7, 2013



TRAVERSE CITY
LIGHT & POWER

Investing Our Energy In You

Traverse City Light & Power
1131 Hastings Street
Traverse City, MI 49686

GRP
Engineering, Inc.

GRP Engineering, Inc.
325 E. Lake Street, Suite 26
Petoskey, MI 49770

**TRAVERSE CITY LIGHT & POWER
SOUTH SUBSTATION STUDY
EXECUTIVE SUMMARY**

The scope of this study was to review the Traverse City Light & Power (TCL&P) distribution system for substation transformer and distribution circuit capacity issues, under normal system peak and first contingency outage conditions. Maximum substation equipment and distribution conductor ratings were established for three system conditions: system normal; first contingency outages; and second contingency outages, all at peak load conditions. Recommendations for additional substation transformer and distribution circuit capacity are provided as determined by the analysis performed in the study. Finally, a review of two potential locations for an additional substation will be performed in the final version of the report.

The maximum substation equipment loading limits and maximum continuous and emergency conductor ampacity ratings were established in this study. Substation transformers and equipment will be sized to operate at 40% of nameplate rating for normal conditions and 80% for first contingency operations. Distribution circuits will be designed to keep conductors within 50% of their thermal rating for normal system conditions under peak loading conditions and 90% for first contingency operations.

Based on the maximum equipment and conductor ratings established in this study, 75% of TCL&P's substation transformers are operating above the 40% rating for normal peak load conditions and 30% of the main distribution circuits are operating above their 50% rating for peak load conditions. Operating substation transformers and distribution circuits above the established ratings does not allow for maintaining service to all customers under 1st contingency outage conditions. The installation of two additional 12/16/20MVA substation transformers plus four 500A distribution circuits at a location near the south-central area of the TCL&P service territory solves the loading issue for two transformers and nearly all of the existing distribution circuits. Additional measures must be taken to increase existing transformer peak ratings or replace transformers which are undersized.

A write-up of the two potential substation sites will be completed following review of the needs established in this draft copy of the report.

Several tables, charts, graphs and drawings are included with this report to clearly state system deficiencies and show results following implementation of proposed recommended.

TRAVERSE CITY LIGHT & POWER SOUTH SUBSTATION STUDY FINDINGS & ANALYSIS

The scope of this study was to review Traverse City Light & Power's (TCL&P) substation transformer and distribution circuit capacity for both existing peak load plus 5 & 10 year load growth. The review was performed for normal system conditions plus first contingency substation and distribution circuit outages. Recommendations for additional substation transformer and distribution circuit capacity are provided as determined by the analysis performed in the study. Finally, a review of two potential locations for an additional substation will be performed in the final version of the report.

Study process included:

- Obtain historical system and circuit load data.
- Determine projected system load growth.
- Establish substation equipment and conductor loading limits.
- Review substation transformer and main distribution circuit conductor capacity at peak load conditions under normal and 1st contingency outage conditions.
- Perform review of system with additional transformer capacity and distribution circuits.
- Evaluate two potential locations for an additional substation as determined by the capacity analysis.

System Background Information

Traverse City Light & Power's substation and distribution system are comprised of the following:

- Four 13.8kV distribution substations including eight power transformers (six rated at 16MVA and two rated at 33.33MVA)
- Twenty-three 13.8kV distribution circuits
- Peak demand 70.6MW (2011) & 70.2MW (2012)
- 2012 Energy 344,574MWh

TCL&P substations are designated with a two letter code which is utilized throughout this study. The codes are as follows for each substation.

- Barlow Substation – BW
- Cass Road Substation – CD
- Parsons Road Substation – PC
- Hall Street Substation – HL

System Load & Growth

TCL&P provided historical substation transformer and circuit loads for peak years 2006, 2011 & 2012. Peak demand occurred on TCL&P's system 2011 with a minor 0.6% decrease in peak demand in 2012. Since this is a capacity and planning study, worst case (peak) load data from July 21, 2011 was utilized in the analysis. No customer load shedding was noted on the operator's log for this date in 2011. A graph of historical system peak load is provided in the attachments section of this report.

Growth in peak demand for TCL&P's electric system is projected to be 1.2% annually for the next ten years according to the recently completed load forecast study for TCL&P by SAIC, dated October 18, 2012. This growth in peak demand includes transfer of customers from Consumers Energy plus reduction in demand from energy optimization programs. According to the study, the annual growth rate for peak demand is projected to be decreased by 0.5% as a result of energy optimization assuming TCL&P meets the legislated standard. No significant load additions are anticipated over the ten-year time period utilized in this study.

Equipment & Conductor Ratings

In order to evaluate the need for additional substation transformer and distribution circuit capacity, not only must system load be determined, but maximum equipment and conductor ratings must be established. Ratings utilized in this study were established for three system conditions:

1. Normal – All substation transformers and distribution circuits in service, bus tie and circuit tie switches open.
2. First Contingency – One substation transformer, distribution circuit breaker or recloser out of service, bus tie switch/circuit tie switch closed. No loss of customers.
3. Second Contingency – Two substation transformers, distribution circuit breakers or reclosers out of service, bus tie switch/circuit tie switch closed. Loss of customers.

Substation equipment including high-side (69kV/138kV) transformers, breakers, circuit switchers, etc. will be allowed to operate at 40% of maximum nameplate rating for normal conditions, 80% for 1st contingency outages, and 100% for 2nd contingency outages. Low-side (13.8kV) substation equipment and distribution circuit conductor, regardless if overhead or underground, will be allowed to operate at 50% of maximum nameplate or thermal rating for normal system conditions, 90% for 1st contingency outages, and 100% for 2nd contingency outages.

Maximum ratings for substation equipment are provided by the manufacturers and are listed on equipment nameplates. Due to the expense and lead time associated with substation transformers and equipment, maximum continuous loading should not exceed nameplate ratings. Short term overloads in emergency situations can be handled by transformers with little or no damage based on percentage of overload and duration.

Overhead conductor ratings are more difficult to establish than equipment ratings since the calculations include thirteen variables including selecting maximum temperature often based on unknown design conditions. The ampacity (thermal) ratings of overhead conductors on TCL&P's system were determined by the following variables:

- 104°F (40°C) Ambient Temperature
- 167°F (75°C) Conductor Temperature (*Normal & 1st Contingency*)
- 212°F (100°C) Conductor Temperature (*Emergency*)
- 2ft/sec wind speed (utility standard)
- Additional eleven variables using a conservative approach.

Standard ACSR conductors can be operated continuously up to 212°F, but system design (sag & clearances) must reflect this rating. Conductor sag at 212°F was likely not factored into majority of overhead circuit design, therefore a more conservative rating (167°F) is prudent to use for normal system conditions. The higher (212°F) thermal rating can be used for emergency operations, but close physical review of sag under these conditions should be undertaken, especially if conditions extend for several hours or longer. Higher short term emergency ratings for overhead and underground conductors can be utilized under extreme conditions. Shortening the lifespan of conductor by operating it above its maximum thermal rating is not the problem that operating transformers above their ratings is. Conductor is relatively low in cost and easily replaceable compared to substation transformers.

Underground conductor ratings were determined based on cable characteristics and installation method based on conductor size.

- 90°C Conductor Temperature (*Normal & 1st Contingency*)
- 105°C Conductor Temperature (*Emergency Rating*)
- 20°C Earth Ambient Temperature
- 75% Load Factor
- Conductors up to #4/0 AL 15kV 1/3rd Concentric Neutral – direct buried, one circuit.
- Large conductors, including all tape-shield power cable – two-way duct bank.
- 133%, EPR conductor insulation.

A table listing the loading conditions outlined above is attached to the end of this report. Distribution conductor ratings were updated in TCL&P's computerized distribution system (WindMil) model utilized for this system analysis.

Substation Transformer Loading

Considering under 1st contingency outage conditions that no loss of service to customers will be allowed, individual substation transformer capacity must be sufficient enough to carry the load of both transformers within the substation. TCL&P's distribution substations all have two transformers each with identical maximum ratings. These transformers operate independently, but include a bus tie switch which allows for either transformer to connect to all distribution circuits served by the substation. Loading each transformer to a maximum of 40% of nameplate rating allows for one transformer to be out of service and the second transformer to carry all distribution circuit load under peak system conditions. Under this 1st contingency outage condition the transformers will be allowed to operate at 80% of maximum rating. This provides capacity for short-term spikes in load, unplanned load growth, and additional load transfer in the event of a 2nd contingency condition. Refer to the Substation Equipment Loading Limit Diagram.

Currently of the eight substation transformers on TCL&P's system, six are operating above the 40% threshold for a normal system, peak load condition. Three substation transformers are operating above 65% of maximum rating including both Barlow Substation transformers and one Cass Road Substation transformer. Refer to the Substation Transformer Loading – System Normal Peak Conditions 2011 chart.

In the event one substation transformer is out of service under peak load conditions and the second substation transformer needs to be utilized to carry all substation load, only Parsons Road

Substation and Hall Street Substation transformers remain under 100% loaded. Refer to the Substation Transformer Loading – Transformer #1 or #2 Out of Service 2011 charts. Transferring load to an adjacent substation via a distribution circuit is feasible for most of the Parsons Road Substation and Cass Road Substation circuits but not Barlow or Hall Street Substation. Refer to the Circuit Backup Review table attached to this report. Highlighted values represent backup substation transformers operating above 80% of nameplate rating, plus substation breakers/reclosers and distribution conductors operating above 90%. All but one backup distribution circuit for Barlow Substation will operate above 90% under peak load conditions. Upon the 1st contingency loss of one substation transformer at Barlow Substation under peak load conditions it is likely that customers will be out of service or damage to the system will occur.

Distribution Circuit Loading

Consistent with the substation transformer outage conditions, no loss of service to customers will be allowed under 1st contingency distribution circuit breaker/recloser or main circuit outage conditions. This will apply to mainline sections of distribution circuits. TCL&P's distribution circuit mainline sections all have normally open tie points to other circuits. Limiting distribution circuit loading to 50% of conductor ampacity allows for one distribution circuit to be out of service and the backup circuit to carry all load under peak system conditions. Under this 1st contingency outage condition the conductor will be allowed to operate at 100% of its thermal rating. Short-term spikes in load will be covered by utilizing the emergency conductor ratings. Refer to the Distribution Circuit Loading Limit Diagram.

Based on 2011 peak load conditions, seven of TCL&P's twenty-three distribution circuits (30%) are operating above their 50% rating. Two of Barlow Substation's circuits are operating above 67% with the other two operating above 37% of their thermal rating. Refer to the TCL&P Circuit Loading 2011 chart. Main line, three-phase circuit conductor loading was analyzed for 2011 peak load, plus five and ten year load growth at 1.2% per year. Drawings are attached to this report depicting conductor operating levels including 50%, 90% and above 100% of the thermal rating for each of these years.

The Circuit Backup Review table attached to this report lists the 29 main distribution circuit ties on TCL&P's system. As stated above, highlighted values represent substation breakers/reclosers and distribution conductors operating above 90% when carrying the load of an adjacent circuit. Nearly 50% of the main distribution circuit ties have the backup circuit exceeding 90% of the conductor rating under 2011 peak load conditions. Over 40% of the circuits exceed maximum continuous thermal rating when backing up another main circuit. Under the 1st contingency loss of one of several distribution circuits at peak load conditions, it is likely that customers will be out of service or damage to the system will occur.

Projects currently in the design or construction stage including the new Parsons Road PC32 circuit and Hall Street HL20 circuit will alleviate some of the distribution circuit loading conditions. Regardless, by 2017, five distribution circuits will exceed the 50% loading level. Future load growth compounds the distribution circuit loading problem. Circuit loading charts for 2017 and 2022 which include load growth and currently proposed circuit changes are also included with this report.

TRAVERSE CITY LIGHT & POWER SOUTH SUBSTATION STUDY RECOMMENDATIONS

Substation Transformer Capacity

Based on the findings that 75% of TCL&P's substation transformers are operating above the 40% threshold for peak load conditions in conjunction with the number of main distribution circuits having insufficient capacity to backup adjacent circuits, additional substation transformer capacity and distribution circuits are required. These are required to maintain service to customers under the first contingency outage conditions established in this study. Installation of a new substation transformer in the south-central portion of the TCL&P service territory would allow for approximately 11MVA of load to be transferred off of Barlow & Cass Road Substations. Keeping within the loading limits established herein, a transformer rated at a minimum of 27.5MVA would be required to serve this amount of load. Options for transformer sizing and number include:

1. Installation of one 20/26.7/33.33MVA transformer at a new substation location and utilize existing circuits and substation transformers to backup the new transformer.
2. Installation of two 12/16/20MVA transformers at a new substation location. The transformers would be loaded less than 40% and would provide necessary transformer backup at the same substation.
3. Installation of one 12/16/20MVA transformer at a new substation location now and a second identical transformer in the future. Existing circuits and substation transformers (Barlow & Cass Road) will backup the new transformer.

The installation of a new substation transformer (or two) only reduces one Barlow Substation transformer and one Hall Street Substation transformer below the 40% level under normal peak load conditions. Five substation transformers will remain loaded above the threshold established herein for normal peak load conditions. Refer to the Substation Transformer Loading – System Normal Peak Conditions 2014 chart which depicts proposed substation transformer loading in 2014. This chart includes load growth, completion of proposed circuit projects, and is based on two new 12/16/20MVA transformers installed at a new substation location. TCL&P should also investigate the ability to increase the maximum transformer rating through the installation of additional cooling fans or oil cooling systems. The more expensive option is to begin a process of replacing substation transformers with higher rated units.

Distribution Circuit Capacity

Consider the fact that 30% of TCL&P's distribution circuits are operating above the 50% rating under peak system conditions and 40% of the main distribution circuits are operating above their maximum rating when utilized as backup circuits, additional distribution circuits are required. Constructing four 500A distribution circuits from a new substation in the south-central area alleviates current circuit loading constraints and provides diversity which increases customer reliability. The proposed circuits would serve four separate geographic areas and would generally separate residential, commercial and industrial loads. Refer to the Proposed Circuit Area drawing in the attachment section for sketch of the areas to be served by the proposed circuits.

The number of distribution circuits which would operate above their 50% rating based under 2014 peak load conditions following the addition of four new circuits is reduced from seven to three. All of Barlow Substation's circuits would operate below the 50% rating under peak load conditions. This does include the installation of the proposed HL20 circuit in conjunction with the Pine Street underground project plus the completion of the PC32 project noted above. Refer to the TCL&P Circuit Loading 2014 chart.

The option to construct three new distribution circuits now plus a fourth in the future is possible. Shifting the very lengthy CD23 circuit which served Brown Bridge Dam along River Road would provide increased reliability to the commercial and industrial customers which are close to the substation. The probability for outages on this eleven mile long circuit is high due to its length and geographic area served. The proposed fourth new distribution circuit would be primarily a residential circuit and serve this long line section.

A review of the main distribution circuit backups following the proposed circuit additions shows that the number of circuit ties operating above 90% is reduced to three. Furthermore, all of these circuits can be served by other circuits at different tie points. Therefore service to all customers would be maintained under peak load conditions with one distribution circuit breaker or recloser being out of service.

Substation Requirements & Location

A complete write-up on the requirements based on the analysis completed herein will be completed following a review of the draft version of this report.

The substation should be designed for two transformers, four distribution circuits, two bays for future capacitor banks, and two bays for advanced metering infrastructure (AMI) connections. Transmission line breakers should be included in the substation to provide increased reliability over a single tap of the transmission line. Additionally, space for a 69kV bus tie breaker should be provided.

Conclusions

The scope of this study was to review the TCL&P distribution system for substation transformer and distribution circuit capacity issues, under normal system peak and first contingency outage conditions. Based on the maximum equipment and conductor ratings established in this study, 75% of TCL&P's substation transformers are operating above the 40% rating for normal peak load conditions. Furthermore, nearly one-third of the main distribution circuits are operating above their 50% rating for peak load conditions.

The installation of two additional substation transformers plus four distribution circuits at a location near the south-central area of the TCL&P service area solves the loading issue for two transformers and nearly all of the existing distribution circuits. Additional measures must be taken to increase existing transformer peak ratings or replace transformers which are undersized.



Cherryland Electric

--- Cooperative ---

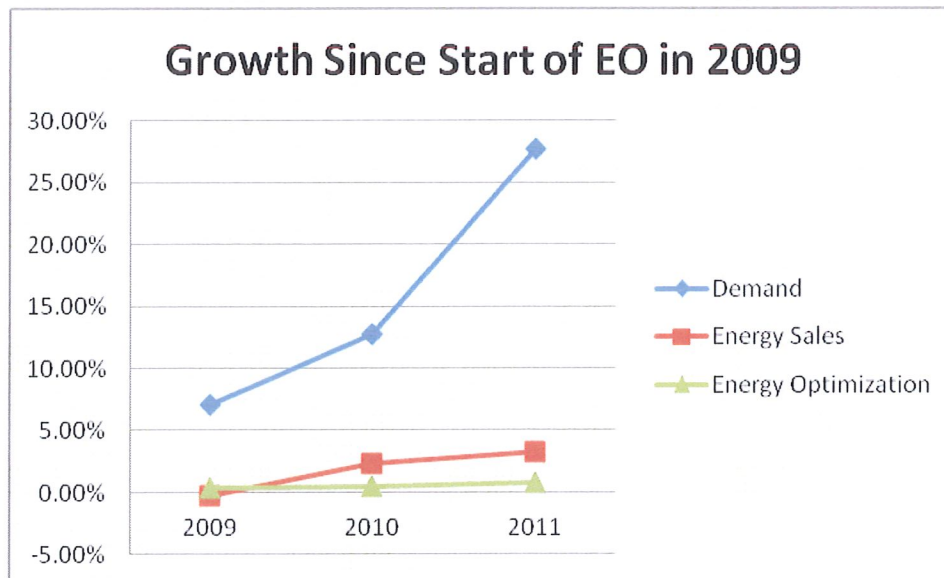
November 15, 2012

TCLP Board of Directors
CO: Tim Arends – Interim Executive Director
Traverse City Light and Power
1131 Hastings St.
Traverse City, MI 49686

Dear Members of the Board,

In the continued spirit of cooperation between adjoining utilities, I would like to qualify Cherryland Electric Cooperative's prior comments about our support for TCLP's need for an additional distribution substation to support growing distribution loads. I will address three main reasons for our support: (1) the growth trends in Cherryland system demand, energy sales, and Energy Optimization achievements; (2) construction efforts on the Cherryland system to keep up with growth, and (3) my experience as a consultant to TCLP prior to my employment at Cherryland. While I do not have current detailed information on the TCLP distribution system, if you look at data for the TCLP system, I believe you will see some common trends between the adjacent systems.

Cherryland has been a longtime supporter of energy efficiency and had been active with our membership long before the Michigan legislature adopted PA295. Cherryland has been exceeding the targets of the EO program since its inception in 2009. However, EO has not significantly impacted the demand for energy on our system or stifled growth. Since the inception of the EO program in 2009, Cherryland's peak energy demand grew 27% and energy sales grew 5.24% by year end 2011, while EO provided only 1.59% reduction in sales. This graph illustrates Cherryland's need for system capacity even with EO.



Distribution substation capacity is a critical component of a utility's ability to serve distribution demand. It serves as a critical gateway between the transmission grid and the distribution grid. On Cherryland's system, our distribution load is dispersed over 16 stations. Since 2009, Cherryland has upgraded three





Cherryland Electric

--- Cooperative ---

stations bordering the Traverse City area in order to keep pace with the demand growth shown above. In Garfield Township, our Potter station was upgraded with a 125% capacity increase and our South Airport station was upgraded with a 50% capacity increase. In East Bay Township, the station was upgraded with a 100% capacity increase.

Prior to my employment with Cherryland, I worked as a consulting engineer at the URS Corporation in Petoskey and completed many projects for TCLP between 1998 and 2003. I was the project engineer on the Hall Street Substation, transmission, and distribution projects as well as the year 2000 Transmission System Study and Thermal Upgrade Project. As part of the study in 2000, I drafted site plans and reviewed potential properties with the intent of a future south side substation. At that time, the study results indicated the need for an additional distribution substation. So, twelve years and three executive directors ago, the need for an additional substation was established.

Why do I feel you need the new substation? The answer lies in considering the capabilities of your present 4 substations, Hall, Barlow, Parsons and Cass. Without going into detailed engineering numbers and equations, simply consider what I believe will happen if you lose service at one of the present 4 locations. It is common utility practice to have the capability to transfer load from one substation to other alternate substations if service is lost at a given substation for any reason. Substations transformers can handle such over loads during emergencies for a period of time without damage. However, distribution lines connecting the alternate locations must also have extra capacity available during times of emergency operation. Based on my past experience and the small amount of knowledge I have of the TCLP system today, I don't believe you have the ability to transfer load to alternate distributions lines because your present system is too heavily loaded on a daily basis. TCLP might survive the loss of a substation in the low load periods of winter but on a hot summer day in July, it is my opinion you will have a problem on your hands if you don't increase your available capacity at a site as proposed on the south side of TC. It is my suggestion that you ask your consulting engineer and internal staff to give their opinion of such an emergency situation.

While Cherryland has not reviewed all current TCLP system details, loads, and growth trends, we have studied our loads and growth trends in the fringe areas surrounding the TCLP system. EO is an important component of our energy future, but it cannot keep pace with the current growth trends. Cherryland continues to grow our EO program, but we still needed to address growth with additional substation capacity. We have knowledge of prior TCLP studies that established the need for additional substation siting and capacity, and we know that no action has been taken over the last 12 years. More aggressive EO action may help stifle long term upgrades in the future, like delaying the need for a second transformer in the new station. The "no build" option actually has been exercised for the last 12 years. Obviously, you can continue with that option. Everyone just needs to be aware of the consequences. I can't, in good conscience, recommend a "no build" option regardless of your conservation success or reliability history.

Sincerely,


Frank Siepker, Jr. P.E.
Engineering and Operations Manager

cc: Tony Anderson, CEC
Tim Arends, TCLP





**TRAVERSE CITY
LIGHT & POWER**

To: Light and Power Board
From: Tim Arends, *Interim* Executive Director/Controller 
Date: February 7, 2013
Subject: Quarterly Financial Report

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

Electric Utility Fund:

As of December 31, 2012 (half way through the fiscal year) operating revenues are 55.5% of budgeted operating revenues. Total revenues have increased 4.1% over the previous year. Residential sales are 4% ahead of the previous year while commercial and industrial sales are just slightly ahead of the prior year. The Board's action to freeze the Power Cost Recovery Rate (PCR) for 2012-13 has resulted in reduced customer bills in the amount of \$963K from July through December of 2012.

Total operating expenses are 51.7% of budget year-to-date, or nearly on-budget. Since revenues (sales) have exceeded budget estimates slightly, expenses for purchased power are also higher. Of note, landfill gas is already over 100% of the anticipated amount due to an increase in production from the projects which TCL&P participates through MPPA. With the exception of purchased power, most other expense categories are at or slightly under budget through the first quarter. Conservation & Public Services is significantly under budget at 17.6% because the \$1 million budgeted in the community investment fund for the bayside legacy project will be transferred to the city in February 2013.

Net income through the second quarter is \$879K which is ahead of budget. The month of December had an operating loss that was primarily due to MISO revenue overpayment corrections from MPPA, as explained in the first quarter report. Those overpayments to TCL&P will be fully offset in the next quarterly report.

Fiber Fund:

Revenues in the Fiber Fund are on-budget while expenses are under budget (favorable). Net income of \$44K has exceeded budgeted projections through December due to lower maintenance activity of the fiber backbone, and no expenses associated with Wi-Fi, as budgeted.

TCL&P is currently in discussion with some potentially new dark fiber customers. Additional revenue would be a benefit to keep the fund moving in a positive financial direction.

TRAVERSE CITY LIGHT & POWER
Schedule of Revenues & Expenses - Budget and Actual
For the Month Ended December 31, 2012

	Current Month	Y-T-D Actual	Annual Budget	% of Budget
Operating revenues - sales	\$ 2,380,084	\$ 15,640,514	\$ 29,208,500	53.5%
Other operating revenues	9,475	1,846,424	2,299,500	80.3%
Total operating revenues	2,389,559	17,486,938	31,508,000	55.5%
<u>Generation expense:</u>				
Purchased power	468,913	4,388,337	6,160,000	71.2%
Stoney corners-wind energy	247,983	1,332,689	2,900,000	46.0%
Combustion turbine	295,192	1,819,857	4,500,000	40.4%
Campbell/belle river	788,069	4,368,040	7,700,000	56.7%
Landfill gas	38,858	165,983	160,000	103.7%
Other operations & maintenance	10,180	109,048	84,750	128.7%
Total generation expenses	1,849,196	12,183,954	21,504,750	56.7%
<u>Distribution expense:</u>				
Operations & maintenance	344,346	1,759,623	3,505,100	50.2%
<u>Transmission expense:</u>				
Operations & maintenance	16,369	112,581	198,350	56.8%
<u>Other operating expense:</u>				
Metering & customer accounting	49,952	217,833	550,000	39.6%
Conservation & public services	91,108	360,070	2,049,350	17.6%
General administration	87,128	508,634	1,145,250	44.4%
Insurance	5,428	22,884	66,500	34.4%
Depreciation expense	150,682	904,091	1,875,000	48.2%
City fee	120,000	720,000	1,578,200	45.6%
Total other operating expenses	504,298	2,733,512	7,264,300	37.6%
Total operating expenses	2,714,208	16,789,670	32,472,500	51.7%
Operating income/(loss)	(324,649)	697,267	(964,500)	-72.3%
<u>Other revenues/(expenses):</u>				
Non-operating revenues	64,349	182,435	360,000	50.7%
Non-operating expenses	0	0	0	---
Net income	\$ (260,300)	\$ 879,702	\$ (604,500)	-145.5%

TRAVERSE CITY LIGHT & POWER
Revenue & Expenses Compared

	December 2012	December 2011	Increase/Decrease	%	Y-T-D 12/31/2012	Y-T-D 12/31/2011	Increase/Decrease	%
	\$	\$	\$	(100.0) #DIV/0!	\$	\$	\$	(100.0) #DIV/0!
Federal Grants	-	(5,082.40)	5,082		-	(5,082.40)	5,082.40	
State Grant - Other	-	-	-		-	-	-	
Residential Sales	512,941.78	499,294.66	13,647.12	2.7	3,032,167.26	2,907,659.99	124,507.27	4.3
Commercial Sales	1,115,247.81	1,139,002.74	(23,754.93)	(2.1)	7,580,118.98	7,535,042.82	45,076.16	0.6
Industrial Sales	714,566.20	651,973.75	62,592.45	9.6	4,725,932.62	4,699,068.96	26,863.66	0.6
Public Authority Sales	14,466.79	13,537.17	929.62	6.9	165,503.71	156,593.78	8,909.93	5.7
Street Lighting Sales	16,237.02	16,222.53	14.49	0.1	97,358.51	97,322.03	36.48	0.0
Yard Light Sales	6,624.40	6,187.53	436.87	7.1	39,433.00	40,781.76	(1,348.76)	(3.3)
Forfeited Discounts	4,423.10	4,019.75	403.35	10.0	31,270.57	23,218.13	8,052.44	34.7
Merchandise & Jobbing	1,255.50	8,759.15	(7,503.65)	(85.7)	19,300.73	40,225.25	(20,924.52)	(52.0)
Interest & Dividend Earnings	62,476.43	24,756.70	37,719.73	152.4	120,677.00	128,367.09	(7,690.09)	(6.0)
Rents & Royalties	1,477.00	4.00	1,473.00	36,825.0	14,785.00	2,534.64	12,250.36	483.3
Sale of Fixed Assets	-	-	-	#DIV/0!	-	-	-	#DIV/0!
Reimbursements	395.80	(68,172.50)	68,568.30	(100.6)	37,302.87	170,796.55	(133,493.68)	(78.2)
Recovery of Bad Debts	-	-	-	#DIV/0!	-	-	-	#DIV/0!
Salvage of Scrap	298.63	556.80	(258.17)	(46.4)	33,939.40	7,656.54	26,282.86	343.3
Miscellaneous Income	3,497.70	(9,058.96)	12,556.66	(138.6)	15,701.09	1,455.99	14,245.10	978.4
Refunds & Rebates	-	36.80	(36.80)	(100.0)	-	6,533.80	(6,533.80)	(100.0)
Pole Rentals	-	-	-	#DIV/0!	9,670.00	-	9,670.00	#DIV/0!
MISO Revenues	-	198,985.88	(198,985.88)	(100.0)	1,746,211.85	1,158,792.16	587,419.69	50.7
Total Revenues	\$ 2,453,908.16	\$ 2,481,023.60	\$ (27,115.44)	(1.1)	\$ 17,669,372.59	\$ 16,970,967.09	\$ 698,405.50	4.1

Expenses:

Generation Operations & Maint	\$ 1,849,195.99	\$ 1,757,447	\$ 91,748.86	5.2	\$ 12,183,953.64	\$ 11,517,716	\$ 666,237.25	5.8
Distribution Operations & Maint	344,345.86	262,158.81	82,187.05	31.4	1,759,622.94	1,460,002.90	299,620.04	20.5
Transmission Operations & Maint	16,368.56	14,235.57	2,132.99	15.0	112,581.28	86,086.65	26,494.63	30.8
Metering & Customer Accounting	49,951.69	38,049.94	11,901.75	31.3	217,833.08	237,266.59	(19,433.51)	(8.2)
Conservation & Public Services	91,108.45	56,755.30	34,353.15	60.5	360,070.28	315,902.97	44,167.31	14.0
Administration	87,127.79	110,714.48	(23,586.69)	(21.3)	508,633.93	589,318.43	(80,684.50)	(13.7)
Other	276,109.94	269,110.39	6,999.55	2.6	1,646,975.10	1,789,010.49	(142,035.39)	(7.9)
Total Expenses	\$ 2,714,208.28	\$ 2,508,471.62	\$ 205,736.66	8.2	\$ 16,789,670.25	\$ 15,995,304.42	\$ 794,365.83	5.0
Net Income	\$ (260,300.12)	\$ (27,448.02)	\$ (232,852.10)	848.3	\$ 879,702.34	\$ 975,662.67	\$ (95,960.33)	(9.8)
	\$ -	\$ -	\$ -		\$ 0	\$ 0	\$ 0	

TRAVERSE CITY LIGHT & POWER

Balance Sheet

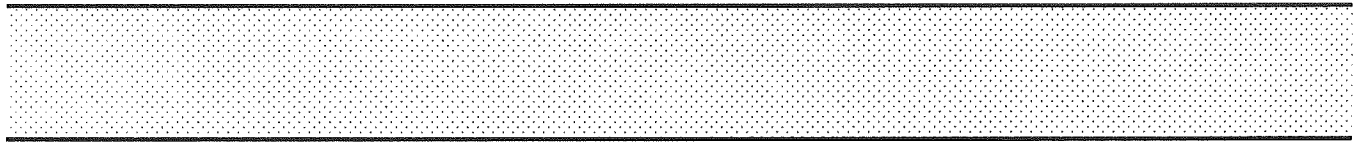
December 31, 2012

ASSETS		LIABILITIES AND NET ASSETS	
Current assets		Current liabilities	
Cash and cash equivalents	\$8,726,164	Accounts payable	\$1,796,893
Investments	19,693,334	Customer deposits & credits	177,791
Receivables		Accrued expenses & other liabilities	357,053
Customer (net of allowance)	3,607,405	Due to primary government	0
Accrued interest	36,400		
Taxes	0	Total current liabilities	2,331,737
Other	93,345		
Inventories	1,685,719	Long-term liabilities	
Prepaid expenses	41,663	Compensated absences	279,430
Total current assets	33,884,029	Total liabilities	2,611,167
Long-term assets		Net assets	
Long-term advances & OPEB assets	900,416	Invested in capital assets	40,587,274
Land and land improvements	1,309,431	Unrestricted	32,173,278
Construction in progress	2,370,216		
Capital assets, net	36,907,627	Total net assets	72,760,552
Total long-term assets	41,487,690		
Total assets	\$75,371,719	Total liabilities and net assets	\$75,371,719

**TRAVERSE CITY LIGHT & POWER
FIBER FUND**
Schedule of Revenues & Expenses - Budget and Actual
For the Month Ended December 31, 2012


	Current Month	Y-T-D Actual	Annual Budget	% of Budget
<u>Operating revenues:</u>				
Charges for services	\$ 17,205	\$ 104,330	\$ 186,500	55.9%
Wi-fi Service Fee - DDA	-	-	65,000	0.0%
Total operating revenues	17,205	104,330	251,500	41.5%
<u>Operating expenses:</u>				
Office & operating supplies	-	-	3,250	0.0%
Supervision & maintenance	974	5,912	66,150	8.9%
Overhead & underground lines	110	7,840	6,000	130.7%
Customer installations	200	1,762	5,600	31.5%
Wi-Fi Operations & Maintenance	-	-	45,000	0.0%
Termination boxes	-	5,096	35,400	14.4%
Safety	-	35	-	---
City fee	-	-	12,600	0.0%
Professional development	-	2,238	500	447.7%
Insurance	93	365	1,450	25.2%
Repairs and Maintenance	-	-	500	0.0%
Miscellaneous	-	-	150	0.0%
Depreciation expense	7,209	43,256	99,800	43.3%
Total operating expenses	8,587	66,504	276,400	24.1%
Operating income/(loss)	8,618	37,826	(24,900)	-151.9%
<u>Non-operating revenues:</u>				
Reimbursements	6,431	6,431	75,900	8.5%
Net income	\$ 15,049	\$ 44,257	\$ 51,000	86.8%

**TRAVERSE CITY LIGHT & POWER
FIBER FUND
Balance Sheet
December 31, 2012**



ASSETS		LIABILITIES AND NET ASSETS	
Current assets		Current liabilities	
Cash and cash equivalents	\$122,942	Accounts payable	\$0
Accounts receivable	9,731	Due to other funds	0
Prepaid Insurance	560	Deferred revenue	12,100
Total current assets	133,234	Total liabilities	12,100
Long-term assets		Net assets	
Construction in progress	77,432	Contribution from other funds	1,208,876
Capital assets, net	1,321,491	Unrestricted fund balance	311,181
Total long-term assets	1,398,923	Total net assets	1,520,057
Total assets	\$1,532,157	Total liabilities and net assets	\$1,532,157



To: Light & Power Board
From: Tim Arends, *Interim* Executive Director/Controller 
Date: February 6, 2013
Subject: Proposed 2013-2014 Budget Schedule

In preparing the 2013 Six Year Capital Improvements Plan and the 2013-2014 Operating Budgets, staff plans to present a “status quo” budget and capital plan to the Board before submission to the City Commission.

Six Year Capital Plan & Budget Review:

Charter Section 179 (o) requires: “The Board shall submit to the City Commission annually with its budget a capital improvements plan for the next six (6) years.”

Charter Section 179 (i) requires: “The Board shall submit to the City Commission on or before the last regular meeting of the City Commission in the month of April (15th in 2013) of each year an itemized budget conforming to the system of accounts required by the State of Michigan.”

Tuesday, February 26, 2013 –Regular Meeting – request of the Board to provide staff with its budget/capital plan expectations for 2013-2014.

Tuesday, April 2, 2013 –Study Session - Budget & Capital Improvements Plan review. (Light & Power Service Ctr. – 1131 Hastings St @ 5:15 p.m.)

Tuesday, April 9, 2013 –Regular Meeting - L&P Board consideration of approval to submit its recommended budget and capital plan to the City for consideration (Government Center @ 5:15 p.m.)

It is anticipated that the Board will commence some level of Strategic Planning either late spring or early summer, which may impact the capital plan, operating budget, or both. These are not “static” documents, and can be modified through budget amendments, etc. throughout the year when the Board is in a better position to set short and long-term goals.

Erik J. Olsen
1312 Minkin Drive
Traverse City, MI 49685
(231) 218-6537

23 January 2013

Thank you again for helping the Scouts of Camp Greilick with their High Adventure Program during the summer of 2012. Because of support from groups like yours, we had a very successful year and one that our participants will hopefully remember for a lifetime! My sincere apologies for the tardiness of this letter and certificate of “thanks”, as I believed it had already been sent out.

As you may have heard, during 2012 the local Scout Council (Scenic Trails Council) was merged with others from across the Lower Peninsula to form the Michigan Crossroads Council. Smaller “Service Councils” were then formed across the state. Scenic Trails was merged with the former Gerald R. Ford Council (covering the southwestern Lower Michigan) to form the new “President Ford Field Service Council”. As part of the reorganization all of the Scout Camps across Lower Michigan were inspected, evaluated, etc. Camp Greilick was assigned to be a Cub Scout Camp during the summer of 2013. As such, we are unfortunately suspending the High Adventure Program for the foreseeable future.

Thank you again for your support in the past!

Yours in Scouting,



Erik Olsen



CAMP GREILICK

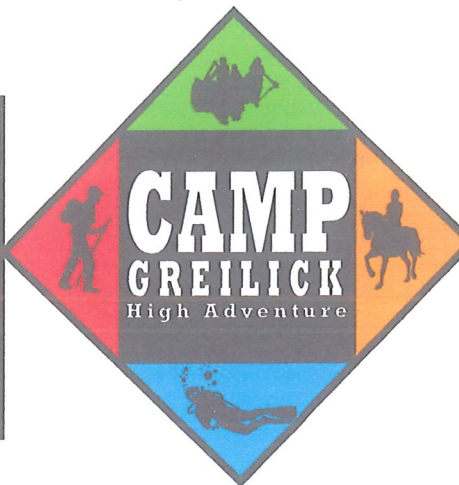
ADVENTURE NORTH

Thank You T.C. Light & Power!

Scenic Trails Council, High Adventure Committee and Scouts would like to thank you and your staff for helping to make Camp Greilick's High Adventure program huge success. Without organizations, such as yourselves, and your willingness to participate in our program, our scouts would not have had the chance to explore what so few others see and do in Northern Michigan.

Experiences such as these, help build leadership and character for these young men. We hope we can count on your continued support for the 2013 High Adventure season.

Yours in Scouting,





Be Energy Smart and Save

Traverse City Light & Power (TCL&P) offers a variety of ways to help customers save energy and money. Have you taken advantage of any of our incentives?

\$150 INCENTIVE

- Purchase a qualified ENERGY STAR® high efficiency heat pump water heater
- Upgrade your furnace to an energy efficient model that includes an electronically commutated motor
- Upgrade your central air conditioning unit to one with a 16 Seasonal Energy Efficiency Rating (SEER)

\$60 INCENTIVE

- Recycle your old refrigerator or freezer with **free** pick up

\$25 INCENTIVE

- Upgrade to an electric water heater with an energy factor greater than or equal to 93%
- Upgrade to a high efficiency electric clothes dryer with moisture sensor
- Purchase a qualified ENERGY STAR refrigerator

\$15 INCENTIVE

- Purchase a qualified ENERGY STAR personal computer
- Upgrade a non-programmable thermostat to a programmable thermostat
- Install an ENERGY STAR-qualified room air conditioner
- Install an ENERGY STAR-qualified dehumidifier

\$10 INCENTIVE

- Purchase a qualified "Smart Strip" or Intelligent Surge Protector



Incentives are offered to business customers when they install more efficient lighting, motors, air systems, refrigeration, HVAC units, building management systems, and custom projects, to name a few.

See the TCL&P website, tcjp.org, for complete program information, including applications, terms and conditions, and equipment guidelines; or call 877-674-7281.

TC Saves

There is still time to take advantage of the TC Saves program! When you sign up you get an energy audit and access to low interest loans. Plus, TCL&P will provide up to 15 CFL bulbs, an energy smart power strip, and a programmable thermostat. **More information can be found at tcsaves.com or by calling 231-620-1060.**




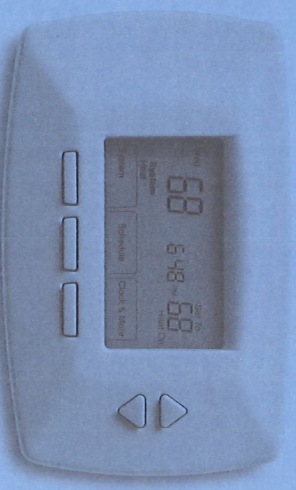
L&P Mission:

To provide safe, reliable, competitively priced energy and related services in an environmentally conscious manner.

Did You Know...

Did you know by turning your thermostat down to 68°F in the winter, you can save a considerable amount of energy? For every degree you lower your heat in the 60°F to 70°F range, you'll save up to 5% on heating costs*. To reduce your energy bills even more, set the temperature even lower when you're asleep or away from home. Together, these steps can reduce your heating costs by up to 15% a year – and that makes wearing a sweater to stay warm worth it!

*Healthy Home Association



Recycle old
appliances
and save!

A Friendly Reminder: Clean Up and Green Up

Mark your calendar! The spring Clean Up and Green Up event will take place on March 10th from 9 a.m. to 3 p.m. at American Waste, 480 Hughes Drive, Traverse City. TCL&P customers will receive a \$15 incentive for recycling a working dehumidifier or room air conditioner and a \$60 incentive for recycling a working refrigerator. See the TCL&P website, tclp.org, for more details.

Update from the Board Chairman: Patrick McGuire

I am pleased to report while the management of Traverse City Light & Power is in transition, the day-to-day operations of our utility are being quite satisfactorily conducted by Interim Executive Director, Tim Arends, and our very capable and experienced employees. Our team is busy making significant progress on projects previously reviewed and approved by the board, including the East Hammond Transmission Substation, the South Side Distribution Substation, the Traverse Heights Distribution Circuit Rehabilitation, the Highland Park Overhead to Underground Distribution Conversion, and additional LED street lighting along major city streets. Upon completion, these projects will enhance the safety and reliability of our system for many years to come.

There is no question that the electric utility industry is facing a more complicated business environment than ever before. Selecting a new, permanent executive director capable of meeting these challenges will be the board's top priority in 2013. As of this writing, the TCL&P board has begun the search process, which has included forming an ad hoc board committee and hiring a consultant to guide the process and interview TCL&P board members, employees, and city commissioners. We hope to be interviewing candidates for the executive director position by late winter or early spring.

The TCL&P board and employees are committed to providing you with the highest level of customer service during and after this transition. We are here to serve you, our customers, and remain as ready and able to assist you as we always have.




Patrick McGuire
Board Chairman



TRAVERSE CITY
LIGHT & POWER
Investing Our Energy In You

1131 Hastings St. | Traverse City, MI 49686
Main Office and 24-Hour Service: **922-4940**
Billing/Other Questions: **922-4431**
Now available: **Paperless billing!**

See the Home Energy Saver and L&P Energy Smart Program at: tclp.org



Proudly serving our community for 100 years.