

A REGULAR MEETING
Of The
TRAVERSE CITY LIGHT AND POWER BOARD

Will Be Held On
TUESDAY, January 24, 2017

At
5:15 p.m.

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

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

Jennifer J. St. Amour
Administrative Assistant
1131 Hastings Street
Traverse City, MI 49686
(231) 922-4940 ext. 201

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

Posting Date: January 20, 2017
3:00 p.m.

AGENDA

Pledge of Allegiance

1. Roll Call

2. Consent Calendar

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

- a. Consideration of approving minutes of the Regular Meeting of January 10, 2017. (Approval recommended) (p.4)
- b. Consideration of authorizing a Letter of Agreement with the Utility Workers Union of American, AFL-CIO Local No. 295. (Approval recommended) (Arends/Menhardt/Schroeder) (p.7)
- c. Consideration of approving a contract amendment with Great Lakes Energy for Afterhours Customer Support and Outage Dispatch Services. (Approval recommended) (Menhardt) (p.10)

Items Removed From Consent Calendar

- a.

3. Unfinished Business

None.

4. New Business

- a. Public Hearing regarding:
 - LED and HPS tariff rates. (Myers-Beman) (p.12)
- b. Consideration of approving a customer exchange with Cherryland Electric Cooperative. (Arends) (p.20)
- c. Consideration of approving the 2017 Strategic Plan. (Arends) (p.34)

5. Appointments

None.

6. Reports and Communications

- a. From Legal Counsel.

b. From Staff.

1. Presentation of the 2015-16 Annual Report. (Myers-Beman) (p.60)

c. From Board.

7. Public Comment

/js

**TRAVERSE CITY
LIGHT AND POWER BOARD**

Minutes of Regular Meeting
Held at 5:15 p.m., Commission Chambers, Governmental Center
Tuesday, January 10, 2017

Board Members -

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

Absent: Bob Spence

Ex Officio Member -

Present: Marty Colburn, City Manager

Others: Tim Arends (via conference call), Karla Myers-Beman, W. Peter Doren, Kelli Schroeder, Pete Schimpke, Scott Menhart, Tony Chartrand, Mark Watson, Gabe Talaga

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

Karla Myers-Beman requested item 4b be removed from the agenda.

Item 2 on the Agenda being Consent Calendar

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

- a. Minutes of the Regular Meeting of December 13, 2016.
- b. Authorizing a Second Amendment to the Lakeland Tower Lease Agreement.
- c. Adopting MDOT Construction ROW Resolution.

CARRIED unanimously. (Spence absent)

Item 3 on the Agenda being Unfinished Business

None.

Item 4 on the Agenda being New Business

1. 2015-16 Financial Audit Presentation.

(The Board Chairman, Jan Geht, recused himself from discussion or voting on this issue.)

The following individuals addressed the Board:

Karla Myers-Beman, Controller
Doug Vredeveld, Vredeveld Haefner, LLC

Moved by Shamroe, seconded by McGuire, that the financial statements for the fiscal year ended June 30, 2016, be accepted.

CARRIED unanimously. (Spence absent, Board Chairman abstained)

2. *Removed.*

3. 2017 Six Year Capital Improvements Plan.

The following individuals addressed the Board:

Pete Schimpke, Manager of Operations and Engineering

Moved by McGuire, seconded by Shamroe, that the Board authorizes the Executive Director to submit the Six Year Capital Improvements Plan – 2017 as presented to the City Manager for review and approval of the City Commission and Planning Commission.

CARRIED unanimously. (Spence absent)

Item 5 on the Agenda being Appointments

None.

Item 6 on the Agenda being Reports and Communications

a. From Legal Counsel.

1. W. Pete Doren reported that his office, Sondee, Racine, and Doren has a new staff member, Mr. Jeffrey L. Jocks. Mr. Jocks will be the substitute for W. Pete Doren in his absence.

b. From Staff.

1. 2017 Strategic Plan Presentation.

The following individuals addressed the Board:

Karla Myers-Beman, Controller

Pete Schimpke, Manager of Operations and Engineering

Tony Chartrand, System Engineer/Key Accounts

Scott Menhart, Manager of Telecom and Technology

Kelli Schroeder, Manager of Human Resources and Communications

2. Discussion of City Resolution to Increase Renewable Energy and Sustainability for the City of Traverse City.

The following individuals addressed the Board:

Jan Geht, Chairman introduced the item.

Marty Colburn, City Manager

3. HPS and LED Public Hearing update.

The following individuals addressed the Board:

Karla Myers-Beman, Controller announced that the public hearing will be set for the January 24th Board meeting.

c. From Board.

1. John Taylor congratulated Jan Geht on his recent election.

Item 7 on the Agenda being Public Comment

There being no objection, Chairman Geht declared the meeting adjourned at 6:33 p.m.

/js

Tim Arends, Secretary
LIGHT AND POWER BOARD



TRAVERSE CITY
LIGHT & POWER

To: Light & Power Board
CC: Tim Arends, Executive Director
From: Kelli Schroeder, Manager of HR & Communications 
Scott Menhart, Manager of Telecommunications & Technology
Date: January 18, 2017
Subject: Great Lakes Energy After-Hour Dispatch Services
Electric System Operator Schedule

As you are aware, TCL&P entered into an Agreement with Great Lakes Energy in August 2015 to provide after-hours dispatch services. Since that time, Great Lakes Energy has been covering the 3rd shift Monday-Friday, 2nd and 3rd shift on weekends and all holiday hours. This collaboration has been working very well for the utility.

At this time, staff is recommending that Great Lakes Energy provide additional dispatch service hours to include weekends in their entirety. This will place an operator on standby during this timeframe and in the future, through attrition, job transfer, etcetera, will allow for a reduction of staff in this department. The amended Agreement has been included in your packet for review. The Agreement will need Board approval as a result of going above the Executive Director's spending authority.

In addition, staff has also included a Letter of Agreement between TCL&P and Utility Workers Union of America, AFL-CIO Local No. 295 that amends the Collective Bargaining Agreement language for the Electric System Operators with respect to their schedule.

These items are appearing on the Consent Calendar as they are deemed by staff to be non-controversial items. Approval of these items on the Consent Calendar mean you agree with staff's recommendation.

If any member of the Board or the public wishes to discuss these matters, other than clarifying questions, they 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 motions would be appropriate:

(RECOMMENDED MOTION ON NEXT PAGE)

FOR THE LIGHT & POWER BOARD MEETING OF JANUARY 24, 2017

MOVED BY _____, SECONDED BY _____,

THAT THE BOARD AUTHORIZE THE EXECUTIVE DIRECTOR TO SIGN THE LETTER OF AGREEMENT BETWEEN TCL&P AND THE UTILITY WORKERS UNION OF AMERICA LOCAL, NO. 295 THAT AMENDS THE COLLECTIVE BARGAINING AGREEMENT LANGUAGE FOR THE ELECTRIC SYSTEM OPERATORS WITH RESPECT TO THEIR SCHEDULE.

MOVED BY _____, SECONDED BY _____,

THAT THE BOARD AUTHORIZE THE EXECUTIVE DIRECTOR TO EXECUTE AN AGREEMENT WITH GREAT LAKES ENERGY FOR AFTER-HOURS DISPATCH SERVICES IN THE AMOUNT OF \$45,000, SUBJECT TO APPROVAL AS TO SUBSTANCE BY THE EXECUTIVE DIRECTOR AND AS TO FORM BY GENERAL COUNSEL.

Letter of Agreement
between
Traverse City Light & Power
and
Utility Workers Union of America, AFL-CIO Local No. 295

Regarding Working Schedule for Electric System Operators

WHEREAS, the undersigned are parties to a Collective Bargaining Agreement expiring on June 30, 2017; and

WHEREAS, TCL&P, in a Letter of Agreement dated August 12, 2015, eliminated 3rd shift and holiday dispatch services and moved this service to Great Lakes Energy; and

WHEREAS, TCL&P is now eliminating weekend dispatch services and moving this service to an external provider, currently Great Lakes Energy; and

WHEREAS, one Electric System Operator is required to be on standby during those times that the dispatch hotline is being serviced by Great Lakes Energy; and

WHEREAS, the current contract, Section 17 (B), *Work Schedule for Electric System Operator Personnel* references "weekend shifts";

THEREFORE, be it known that the Employer and the Union agree that:

The work schedule for Electric System Operators will be Monday through Friday, first and second shift. Hours outside of this work schedule, including holidays, will be covered by an external service, with one Electric System Operator required to be on standby during those times.

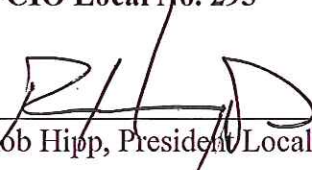
WHEREBY, the parties signify agreement to the above by representative signatures appearing hereon.

Traverse City Light & Power Department

By: _____
Timothy Arends, Executive Director

Date: _____

**Utility Workers Union of America,
AFL-CIO Local No. 295**

By:  _____
Rob Hipp, President Local 295

Date: 12-30-16

FIRST AMENDMENT TO
AFTERHOURS CUSTOMER SUPPORT AND OUTAGE DISPATCH SERVICES INTER-
UTILITY AGREEMENT

THIS AMENDMENT is made and entered into as of the _____ day of _____, 2017, by and between the TRAVERSE CITY LIGHT & POWER DEPARTMENT, a Michigan municipal electric utility, whose address is 1131 Hastings Street, Traverse City, Michigan 49686 ("TCL&P"), and GREAT LAKES ENERGY ("GLE"), with its principal offices at 1323 Boyne Ave, Boyne City, Michigan 49712.

RECITALS

WHEREAS, TCL&P and GLE have entered into a Services Inter-Utility Agreement dated August 12, 2015 and wish to amend that Agreement to add additional coverage.

NOW THEREFORE, in consideration of the recitals and agreements contained herein and contained in the Services Inter-Utility Agreement TCL&P and GLE hereby agree as follows:

1. GLE shall provide the Services between the hours of 10 p.m. and 6:00 a.m. on normal business days (Monday through Friday) and twenty-four (24) hours per day on: Saturday, Sunday, Holidays, and Office Closure Days. In addition, there will be 16 "flex-hours" per week that GLE can cover for TCL&P in the event an unforeseen issue arises preventing TCL&P to coverage. The flex-hours will give TCL&P administration time to find suitable coverage of operations.
2. GLE shall continue to provide the services in the manner set forth in SCHEDULE A attached hereto and made a part of this Agreement. The afterhours customer support and outage crew dispatch services, including those specifically identified within the "Afterhours Response Manual" attached hereto as SCHEDULE A, shall be collectively referred to as "the Services." The Services can be located online (<https://goo.gl/EypjCA>) and can be updated as agreed upon by TCL&P and GLE.
3. GLE agrees to perform the Services for an annual fee of \$45,000 to be paid in monthly installments of \$3,750.
4. The Services Inter-Utility Agreement signed by the parties on August 12, 2015 is continued in all respects and is amended as here described.

IN WITNESS WHEREOF, the parties below have entered into this Amendment on the date set forth above.

TRAVERSE CITY LIGHT & POWER DEPARTMENT

By: Jan Geht, Chairman

APPROVED AS TO FORM

By: Timothy Arends, Executive Director

GREAT LAKES ENERGY

By: W. Peter Doren

Traverse City Light & Power
General Counsel

By: Bill M. Scott, VP, CFO & COO

FOR THE LIGHT & POWER BOARD MEETING OF JANUARY 24, 2017



TRAVERSE CITY
LIGHT & POWER

To: Light & Power Board
From: Karla Myers-Beman, Controller
Date: January 15, 2017
Subject: Approval of HPS and LED rate increase effective February 1, 2017

At the December 13, 2016 board meeting, the Board requested that staff update the High Pressure Sodium (HPS) Rates through a rate study and for those updates to be presented in conjunction with the LED Rates originally presented to the board in November.

The HPS and LED rates were developed on the basis of recouping funds for assets when the utility outlays the funds. In one scenario, the utility is maintaining and providing energy to the 35 watt acorn lights located in the neighborhoods. However, the fixture and poles were paid by the utility's ratepayers through a special assessment, therefore, the utility is only recouping the maintenance and energy cost on those lights not the fixture/pole asset portion. In another scenario, the utility has the same 35 watt acorn lights located in parking lots with the fixture/pole assets paid for by the utility. In that instance the fixture/pole asset cost will be added to the rate to allow the utility to recapture the initial outlay of funds.

Additionally, in the tariff rate we have separated out light component costs where possible from the pole costs to provide clearer understanding of the components of the rates.

The results of the rate study show that HPS rates are higher than LED rates due to the maintenance costs relating to the bulb, ignitor and ballast replacement that occurs every five to ten years and higher consumption of electricity, even though LED light fixture costs are higher than HPS.

The public hearing, in accordance with the Board motion at the December 13, 2016 board meeting, has been scheduled for today's meeting, with public notice provided through an advertisement in the Traverse City Record Eagle on January 19, 2017 and posted on the TCL&P website. Letters detailing the new rates for LED lights were mailed out to customers who currently have an active yard light on their account, on December 2, 2016.

After the public hearing, if the Board concurs with implementing the new LED and HPS light rates included in the tariff sheets following this board memo the following motion is appropriate:

MOVED BY _____, SECONDED BY _____,

**THAT THE BOARD AUTHORIZES THE AMENDED STREET LIGHTING AND PRIVATE
AREA LIGHTING TARIFF RATES AS PRESENTED EFFECTIVE FEBRUARY 1, 2017.**

City of Traverse City
 Light and Power Department
 Effective: July 1, 2014
 Amended:

PRIVATE AREA LIGHTING SERVICE

(Rate "PAL")

Availability:

Open to any customer desiring photoelectric-controlled, un-metered Private Area Lighting (also referred to as "Security Lighting" or "Dusk-to-Dawn" lighting).

Nature of Service:

The Department will install, own and maintain un-metered, photoelectric-controlled luminaires in mutually-agreeable locations as required by the customer. Standard overhead equipment includes wood poles and non-decorative fixtures. Any lighting system other than this will be charged based on expected life and a ~~8.5%~~ 5% carrying cost of capital. The Light and Power Board retains the right to self-fund special lighting projects that it determines are in the best interest of the City.

Monthly Rate:

One existing pole: <u>TYPE OF LUMINAIRE</u>	<u>Nominal Rating of Lamps (One Lamp Per Luminaire)</u>		<u>Rate per month</u>
	<u>Watts</u>	<u>Lumens</u>	
HIGH PRESSURE SODIUM			
High Level Light	<u>100</u>	<u>8,500</u>	\$ 6.52 <u>10.61</u>
High Level Light	<u>250</u>	<u>24,000</u>	\$ 9.73 <u>14.71</u>
Low Level Pedestrian Light	<u>35</u>	<u>3,600</u>	\$11.39 <u>12.17</u>
<u>Low Level Pedestrian Light</u> (Energy and maintenance only)	<u>35</u>	<u>3,600</u>	<u>\$ 6.04</u>
<u>Low Level Pedestrian Light</u>	<u>50</u>	<u>5,100</u>	<u>\$12.54</u>
<u>Low Level Pedestrian Light</u>	<u>100</u>	<u>8,500</u>	<u>\$13.72</u>
For each alternate cut-off, decorative fixture:			\$ 1.51
LED			
<u>Low Level Pedestrian Light</u>	<u>50</u>	<u>3,300</u>	<u>\$ 7.33</u>
<u>High Level Light</u>	<u>54</u>	<u>15,000</u>	<u>\$ 8.19</u>
<u>High Level Light</u>	<u>62</u>	<u>6,500</u>	<u>\$ 9.78</u>
<u>High Level Light</u>	<u>112</u>	<u>8,500</u>	<u>\$ 9.87</u>
<u>High Level Light</u>	<u>119</u>	<u>12,900</u>	<u>\$11.57</u>
<u>High Level Light</u>	<u>137</u>	<u>15,000</u>	<u>\$12.12</u>
<u>High Level Light</u>	<u>283</u>	<u>30,000</u>	<u>\$17.31</u>

City of Traverse City
Light and Power Department
Effective:
Amended:

Private Area Lighting Service (Rate "PAL"), cont.

The charge per pole (per month) shall be:

POLES

For each additional <u>Wood</u> pole required:	<u>\$ 3.56</u>
<u>Fiberglass pole</u>	<u>\$ 9.49</u>
<u>Candy cane pole</u>	<u>\$15.94</u>
<u>Acorn pole</u>	<u>\$10.59</u>

Terms and Conditions:

Initial minimum term is one (1) year for each installation.

Special Conditions:

Where the customer desires other than standard wood poles or desires underground wiring or special equipment not covered herein, the Department, at its option, will provide such facilities by special agreement. In addition, the customer agrees to furnish the Department with a trenchable route across their property, if needed, and agrees to restore any damage due to trenching at their cost.

Due Date:

The due date of the customer's bill will be shown on the bill and will be at least twenty-one (21) days after mailing. Payments received after the due date are considered late, and a penalty charge of 2% shall be imposed as a one-time charge.

Michigan Sales Tax:

This tax shall be added to all bills, including minimum, where applicable.

Termination of Service:

~~If a customer cancels service prior to three (3) years from installation date, customer must pay the cost of installation as follows:~~

- ~~1. Without a pole: \$220.00~~
- ~~2. With a pole: \$300.00~~

City of Traverse City
 Light and Power Department
 Effective: July 1, 2014
 Amended:

STREET LIGHTING SERVICE

(Rate "GV")

Availability:

Open to the State of Michigan or any political subdivision or agency thereof having jurisdiction over public streets or roadways for street lighting service for any system consisting of one or more luminaires where the Department has an existing distribution system with secondary voltage available.

Nature of Service:

The Department will furnish, install, and own all equipment comprising the street lighting system. The Department will supply the energy and maintain the entire equipment with the replacement of the asset subject to the utility's Decorative Lighting Policy and Street Lighting Operations and Maintenance Policy. In areas where the Department has installed a residential underground electric distribution system, the street lighting system will be served from said underground electric distribution system. In all other areas, the street lighting system will normally be served from either overhead lines or from underground cables as available. Standard overhead equipment includes wood poles and non-decorative fixtures. Any lighting system other than this will be charged based on expected life and an ~~8.5%~~ 5% carrying cost of capital. The Light and Power Board retains the right to self-fund special lighting projects that it determines are in the best interest of the City.

Monthly Rate:

The charge per luminaire (per month) shall be:

<u>Type of Luminaire</u>	<u>Nominal Rating of Lamps (One Lamp Per Luminaire)</u>		<u>Rate Per Luminaire (per month)</u>
	<u>Watts</u>	<u>Lumens</u>	
<u>HIGH PRESSURE SODIUM</u>			
High Level Light	100	8,500	\$ 7.97 <u>10.61</u>
High Level Light	250	24,000	\$ 10.87 <u>14.71</u>
Low Level Pedestrian Light	35	3,600	\$ 11.39 <u>12.17</u>
Low Level Pedestrian Light	50	<u>5,100</u>	\$ 11.39 <u>12.54</u>
Low Level Pedestrian Light	100	<u>8,500</u>	\$ 12.09 <u>13.72</u>
Designated Areas (LL)	35	<u>3,600</u>	\$ 2.02 <u>6.04</u>
Designated Areas (LL)	50	<u>5,100</u>	\$ 2.64 <u>6.41</u>
<u>Tart Trail Globe Lights (LL)</u>	<u>70</u>	<u>6,300</u>	<u>\$ 9.16</u>
<u>City of TC 8th Flasher</u>			<u>\$ 13.20</u>

<u>Type of Luminaire</u>	<u>Nominal Rating of Lamps (One Lamp Per Luminaire)</u>		<u>Rate Per Luminaire (per month)</u>
	<u>Watts</u>	<u>Lumens</u>	
Cut-off Without Pole (LL)	100		\$ 9.50
Cut-off (LL)	100		\$ 12.09
100 Watt with Deco Arm	100		\$ 9.50
Barlow 100 Watt	100		\$ 6.52
For alternate cut-off, decorative fixture: \$1.51 per month.			
<u>LED</u>			
High Level Light	45	3,300	\$ 7.43
High Level Light	54	15,000	\$ 8.19
High Level Light	112	8,500	\$ 9.87
High Level Light	130	28,000	\$ 11.11
High Level Light	157	28,000	\$ 12.56
Low Level Pedestrian – Candy Cane	50	3,300	\$ 7.33
Low Level Pedestrian– Garland Street (Energy only)	75	7,482	\$ 4.50
Low Level Pedestrian– Silver Drive	86	4,630	\$ 12.76

The charge per pole (per month) shall be:

<u>Pole Type</u>	<u>Rate Per Pole (per month)</u>
West Front Street (includes lighting component)	\$ 19.64
Silver Drive	\$ 8.53
Candy Cane	\$ 15.94
Acorn	\$ 10.59

Near intersections, the Department, at its option and expense, may install a 50 watt lamp in lieu of a 35 watt lamp.

Due Date:

The due date of the customer's bill will be shown on the bill and will be at least twenty-one (21) days. Payments received after the due date are considered late, and a penalty charge of 2% shall be imposed as a one-time charge.

City of Traverse City
LED Street Lighting COS Study

Total Monthly Cost per Lamp Summary							
Lamp Type	Monthly Power Supply		Monthly O&M, Depreciation & ROR		Monthly Customer Service		Current Light Rate per Comparable Lamp Wattage
	Cost/Light	2.26 \$	6.21 \$	2.82 \$	Distribution Cost/Light	Total Monthly Tariff Rate	
SL 157 Watt LED (250W HPS) (HL)	\$	2.26 \$	6.21 \$	2.82 \$	1.26 \$	12.56 \$	10.87
SL 130 Watt LED (250W HPS) (HL)	\$	1.87 \$	5.37 \$	2.82 \$	1.04 \$	11.11 \$	10.87
SL 112 Watt LED (250W HPS) (HL)	\$	1.61 \$	4.53 \$	2.82 \$	0.90 \$	9.87 \$	10.87
SL 54 Watt LED (100W HPS) (HL)	\$	0.78 \$	4.15 \$	2.82 \$	0.43 \$	8.19 \$	7.97
SL 45 Watt LED (100W HPS) (HL)	\$	0.65 \$	3.60 \$	2.82 \$	0.36 \$	7.43 \$	7.97
SL 50 Watt LED (LL) Candy Cane	\$	0.72 \$	3.39 \$	2.82 \$	0.40 \$	7.33 \$	12.09
SL 86 Watt LED (LL) Silver Drive	\$	1.24 \$	8.00 \$	2.82 \$	0.69 \$	12.76 \$	-
SL 75 Watt LED (LL) Garland Street	\$	1.08 \$	-	2.82 \$	0.60 \$	4.50 \$	-
TART Trail 54 Watt (100W HPS)	\$	0.78 \$	4.15 \$	2.82 \$	0.43 \$	8.19 \$	-
EASC 62 Watt LED	\$	0.89 \$	5.56 \$	2.82 \$	0.50 \$	9.78 \$	6.52
EASC 119 Watt LED	\$	1.72 \$	6.08 \$	2.82 \$	0.96 \$	11.57 \$	-
EASC 137 Watt LED	\$	1.98 \$	6.23 \$	2.82 \$	1.10 \$	12.12 \$	9.73
EASC 283 Watt LED	\$	4.08 \$	8.13 \$	2.82 \$	2.27 \$	17.31 \$	-
Wood Pole	\$	-	3.56 \$	-	-	3.56 \$	1.63
Silver Drive Pole	\$	-	8.53 \$	-	-	8.53 \$	-
West Front Pole (includes lighting component)	\$	-	19.64 \$	-	-	19.64 \$	-

City of Traverse City
COS Study - HPS Rates - Compared to Private Area Lightin

COS Study - HPS Rates - Compared to Private Area Lightin								Cost recovery for power supply provided to lighting			Cost recovery for installation and replacement of light assets		Cost recovery for billing, service calls, scheduling maint.		Cost recovery for use of distribution system											
Lamp Type	Total Monthly Cost per Lamp Summary							Utility Purchased Asset Cost/Lamp	Utility Purchased Pole Cost	Total Cost																
	Monthly Power Supply Cost / Light	Monthly O&M, Depreciation & ROR Cost / Light	Monthly Customer Service Cost / Light	Monthly kW Distribution Cost / Light																						
																		Current Price per Tariff Rate			LED Proposed Replacement Low Rate			LED Proposed Replacement High Rate		
																		per Tariff Rate	\$ Difference	% Difference	Low Rate	\$ Difference	% Difference	High Rate	\$ Difference	% Difference
250W HPS Multip Tap Cutoff Fixture	\$	4.15	\$	6.07	\$	2.82	\$	2.01	\$	15.04	\$	-	\$	15.04	11.24	\$	3.80	33.84%	9.87	\$	5.17	52.42%	12.56	\$	2.48	19.77%
100W HPS Muti Tap Cutoff Fixture	\$	1.66	\$	5.34	\$	2.82	\$	0.80	\$	10.63	\$	-	\$	10.63	8.03	\$	2.60	32.33%	7.43	\$	3.20	43.01%	8.19	\$	2.44	29.74%
250W Hooded Light	\$	4.15	\$	5.94	\$	2.82	\$	2.01	\$	14.91	\$	-	\$	14.91	9.73	\$	5.18	53.26%	9.87	\$	5.04	51.09%	12.56	\$	2.35	18.73%
100W Hooded Light	\$	1.66	\$	5.37	\$	2.82	\$	0.80	\$	10.65	\$	-	\$	10.65	6.52	\$	4.13	63.37%	7.43	\$	3.22	43.36%	8.19	\$	2.46	30.06%
250W HPS CobraHead	\$	4.15	\$	5.20	\$	2.82	\$	2.01	\$	14.17	\$	-	\$	14.17	11.24	\$	2.93	26.09%	9.87	\$	4.30	43.59%	12.56	\$	1.61	12.83%
100W HPS Cobra Head	\$	1.66	\$	5.26	\$	2.82	\$	0.80	\$	10.55	\$	-	\$	10.55	8.03	\$	2.52	31.32%	7.43	\$	3.12	41.93%	8.19	\$	2.36	28.76%
Combined 250 W HPS	\$	4.15	\$	5.73	\$	2.82	\$	2.01	\$	14.71	\$	-	\$	14.71	11.24	\$	3.47	30.87%	9.87	\$	4.84	49.03%	12.56	\$	2.15	17.11%
Combined 100 W HPS	\$	1.66	\$	5.32	\$	2.82	\$	0.80	\$	10.61	\$	-	\$	10.61	8.03	\$	2.58	32.10%	7.43	\$	3.18	42.77%	8.19	\$	2.42	29.52%
100W Low Level Pedestrian (Candy Cane)	\$	1.66	\$	8.43	\$	2.82	\$	0.80	\$	13.72	\$	15.94	\$	29.66					21.92	\$	7.74	35.31%	21.92	\$	7.74	35.31%
35W Designated Areas (Acorn) - Energy & Maintenance	\$	0.58	\$	2.35	\$	2.82	\$	0.28	\$	6.04	\$	-	\$	6.04					Not converted yet				Not converted yet			
35W Designated Areas (Acorn)	\$	0.58	\$	8.49	\$	2.82	\$	0.28	\$	12.17	\$	10.59	\$	22.76	11.39	\$	11.37	99.84%	Not converted yet				Not converted yet			
50W Designated Areas (Acorn)	\$	0.83	\$	8.49	\$	2.82	\$	0.40	\$	12.54	\$	10.59	\$	23.13					Not converted yet				Not converted yet			
Candy Cane Pole	\$	-	\$	15.94	\$	-	\$	-	\$	-	\$	15.94	\$	15.94												
Acorn Pole	\$	-	\$	10.59	\$	-	\$	-	\$	-	\$	10.59	\$	10.59												
Fiberglass Pole	\$	-	\$	9.49	\$	-	\$	-	\$	-	\$	9.49	\$	9.49												

City of Traverse City
COS Study - HPS Rates - Compared to Street Lighting

Lamp Type	Cost recovery for power supply provided to lighting	Cost recovery for installation and replacement of light assets	Cost recovery for billing, service calls, scheduling maint.	Cost recovery for use of distribution system															
	Total Monthly Cost per Lamp Summary																		
	Monthly Power Supply Cost / Light	Monthly O&M, Depreciation & ROR Cost / Light	Monthly Customer Service Cost / Light	Monthly kW Distribution Cost / Light	Utility Purchased Asset Cost/Lamp	Utility Purchased Pole Cost	Total Cost												
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	Current Price per Tariff Rate	\$ Difference	% Difference	LED Proposed Replacement Low Rate	\$ Difference	% Difference	LED Proposed Replacement High Rate	\$ Difference	% Difference			
250W HPS Multip Tap Cutoff Fixture	\$ 4.15	\$ 6.07	\$ 2.82	\$ 2.01	\$ 15.04	\$ -	\$ 15.04	12.38	\$ 2.66	21.52%	9.87	\$ 5.17	52.42%	12.56	\$ 2.48	19.77%			
100W HPS Muti Tap Cutoff Fixture	\$ 1.66	\$ 5.34	\$ 2.82	\$ 0.80	\$ 10.63	\$ -	\$ 10.63	9.48	\$ 1.15	12.09%	7.43	\$ 3.20	43.01%	8.19	\$ 2.44	29.74%			
250W Hooded Light	\$ 4.15	\$ 5.94	\$ 2.82	\$ 2.01	\$ 14.91	\$ -	\$ 14.91	10.87	\$ 4.04	37.19%	9.87	\$ 5.04	51.09%	12.56	\$ 2.35	18.73%			
100W Hooded Light	\$ 1.66	\$ 5.37	\$ 2.82	\$ 0.80	\$ 10.65	\$ -	\$ 10.65	7.97	\$ 2.68	33.65%	7.43	\$ 3.22	43.36%	8.19	\$ 2.46	30.06%			
250W HPS CobraHead	\$ 4.15	\$ 5.20	\$ 2.82	\$ 2.01	\$ 14.17	\$ -	\$ 14.17	12.38	\$ 1.79	14.48%	9.87	\$ 4.30	43.59%	12.56	\$ 1.61	12.83%			
100W HPS Cobra Head	\$ 1.66	\$ 5.26	\$ 2.82	\$ 0.80	\$ 10.55	\$ -	\$ 10.55	9.48	\$ 1.07	11.24%	7.43	\$ 3.12	41.93%	8.19	\$ 2.36	28.76%			
Combined 250 W HPS	\$ 4.15	\$ 5.73	\$ 2.82	\$ 2.01	\$ 14.71	\$ -	\$ 14.71	12.38	\$ 2.33	18.82%	9.87	\$ 4.84	49.03%	12.56	\$ 2.15	17.11%			
Combined 100 W HPS	\$ 1.66	\$ 5.32	\$ 2.82	\$ 0.80	\$ 10.61	\$ -	\$ 10.61	9.48	\$ 1.13	11.89%	7.43	\$ 3.18	42.77%	8.19	\$ 2.42	29.52%			
100W Low Level Pedestrian (Candy Cane)	\$ 1.66	\$ 8.43	\$ 2.82	\$ 0.80	\$ 13.72	\$ 15.94	\$ 29.66	12.09	\$ 17.57	145.32%	21.92	\$ 7.74	35.31%	21.92	\$ 7.74	35.31%			
35W Designated Areas (Acorn) - Energy & Maintenance	\$ 0.58	\$ 2.35	\$ 2.82	\$ 0.28	\$ 6.04	\$ -	\$ 6.04	2.02	\$ 4.02	198.87%	Not converted yet			Not converted yet					
50W Designated Areas (Acorn) - Energy & Maintenance	\$ 0.83	\$ 2.35	\$ 2.82	\$ 0.40	\$ 6.41	\$ -	\$ 6.41	2.64	\$ 3.77	142.66%	Not converted yet			Not converted yet					
35W Designated Areas (Acorn)	\$ 0.58	\$ 8.49	\$ 2.82	\$ 0.28	\$ 12.17	\$ 10.59	\$ 22.76	11.39	\$ 11.37	99.84%	Not converted yet			Not converted yet					
50W Designated Areas (Acorn)	\$ 0.83	\$ 8.49	\$ 2.82	\$ 0.40	\$ 12.54	\$ 10.59	\$ 23.13	11.39	\$ 11.74	103.08%	Not converted yet			Not converted yet					
Tart Trail Globe Lights	\$ 1.16	\$ 4.62	\$ 2.82	\$ 0.56	\$ 9.16	\$ 15.94	\$ 25.10	13.04	\$ 12.06	92.51%	Not converted yet			Not converted yet					
Candy Cane Pole	\$ -	\$ 15.94	\$ -	\$ -	\$ -	\$ 15.94	\$ 15.94												
Acorn Pole	\$ -	\$ 10.59	\$ -	\$ -	\$ -	\$ 10.59	\$ 10.59												

FOR THE LIGHT & POWER BOARD MEETING OF JANUARY 24, 2017



TRAVERSE CITY
LIGHT & POWER

To: Light & Power Board
From: Tim Arends, Executive Director
Date: January 15, 2017
Subject: Customer exchange with Cherryland Electric Cooperative

At the March 22, 2016 board meeting, staff presented the idea of Cherryland Electric Cooperative (CEC) acquiring the line segment from the end of Cass Road to what was Brown Bridge Dam. The Board agreed with staff to pursue the territory swap further as this line no longer serves the purpose it once did because of the decommissioning of the Brown Bridge Dam.

Staff and attorneys from both utilities have drafted the attached proposed agreement for a service territory swap of customers with an annual consumption of approximately 1.5M kWh's. This agreement has no monetary consideration. TCL&P will be transferring the customers on the line previously described while CEC will be transferring customers located on Three Mile Road and in the Barlow area. (Maps will be presented at the board meeting of the customer locations included in the load swap.)

Some issues to consider while contemplating this agreement are: 1) TCL&P's current residential customers may see a rate increase in their monthly electricity bill. Commercial customers may see a rate increase or decrease based on their consumption. 2) TCL&P will no longer have a franchise agreement with Paradise Township. 3) TCL&P will incur additional costs in the approximate amount of \$77,000 to remove a portion of the current River Road distribution line from the end of Cass Road to River Road as it will no longer be necessary. This project will remove infrastructure within the conservation district area beautifying it for the community.

Other issues consider are: 1) By taking the approach of a customer territory swap, the utility is securing the revenue base going forward without impairing the utility to future expansion of its system in the contiguous townships surrounding the city. 2) The distribution lines held by CEC and TCL&P are both nearing end of life. Therefore, the utility will eliminate future capital requirements estimated at \$1.2M in rebuilding the River Road distribution line; however, line improvements may be required to the new service territory area. 3) The transfer will allow both utilities to best serve their respective members and customers by providing redundant service to the current TCL&P customers, and allow the TCL&P service area to become more condensed leading to operational efficiencies.

Staff recommends the Board authorize the service territory agreement with CEC because this agreement will create operational efficiencies for TCL&P. The CEC Board of Directors at a recent meeting approved the agreement. If the Board agrees with staff's recommendation, the following motion is appropriate:

(RECOMMENDED MOTION IS ON THE NEXT PAGE)

FOR THE LIGHT & POWER BOARD MEETING OF JANUARY 24, 2017

MOVED BY _____, SECONDED BY _____,

THAT THE BOARD AUTHORIZES THE CHAIRMAN AND SECRETARY TO ENTER INTO AN AGREEMENT WITH THE CHERRYLAND ELECTRIC COOPERATIVE FOR THE TRANSFER AND EXCHANGE OF ELECTRIC DISTRIBUTION FACILITIES AND ACCOUNTS, SUBJECT TO APPROVAL AS TO SUBSTANCE BY THE EXECUTIVE DIRECTOR AND AS TO FORM BY GENERAL COUNSEL AND APPROVAL BY THE MICHIGAN PUBLIC SERVICE COMMISSION.

AGREEMENT FOR THE TRANSFER AND EXCHANGE OF ELECTRIC DISTRIBUTION FACILITIES AND ACCOUNTS

This Agreement for the Transfer and Exchange of Electric Distribution Facilities and Accounts ("Agreement") is made November __, 2016, between Cherryland Electric Cooperative ("Cherryland"), a Michigan non-profit corporation with its principal offices at 5930 US 31 South, Grawn, Michigan 49637, and the Traverse City Light and Power Department ("TCLP"), a Michigan municipal electric utility whose address is 1131 Hastings Street, Traverse City, Michigan 49686. Cherryland and TCLP may sometimes be referred to as the "Parties".

RECITALS

- A. Cherryland and TCLP are engaged in the business of providing electric transmission and distribution services to their members and customers in northern Michigan;
- B. Cherryland and TCLP acknowledge and recognize the long term benefits to their respective members and customers attendant with improvements to each utility's infrastructure and efficiencies;
- C. Cherryland and TCLP have each identified certain service territories and electric distribution facilities that could be exchanged in order to better serve their respective members and customers;
- D. Cherryland and TCLP have agreed to exchange, transfer or assign certain described electric distribution facilities, easements and accounts on the terms and conditions herein contained; and

Now, therefore, in consideration of the mutual promises, representations, warranties and undertakings hereinafter set forth, Cherryland and TCLP agree as follows:

ARTICLE I TRANSFER AND EXCHANGE

1.01 Personal Property Transferred from Cherryland to TCLP. Subject to the terms and conditions in this Agreement, Cherryland agrees to transfer to TCLP, and TCLP agrees to accept from Cherryland on the Closing Date (as defined below) and pursuant to a Bill of Sale in a form and substance acceptable to TCLP, the following described electric distribution facilities (which are referred to collectively as the "Personal Property Lot No. 1"):

Asset to be Transferred to TCLP

Quantity

(intentionally left blank – to be completed by CEC)

Personal Property Lot No. 1 is generally depicted on the map attached hereto and made a part hereof as Schedule A. Any conflicts or inconsistencies between the specifically identified assets

listed above and those generally depicted in Schedule A shall be resolved in favor of the assets specifically identified and listed above.

1.02 Personal Property Transferred from TCLP to Cherryland. Subject to the terms and conditions in this Agreement, TCLP agrees to transfer to Cherryland, and Cherryland agrees to accept from TCLP on the Closing Date and pursuant to a Bill of Sale in a form and substance acceptable to Cherryland, the following described electric distribution facilities (which are referred to collectively as the "Personal Property Lot No. 2"):

<u>Asset to be Transferred to Cherryland</u>	<u>Quantity</u>
<i>(intentionally left blank – to be completed by TCLP)</i>	

Personal Property Lot No. 2 is generally depicted on the map attached hereto and made a part hereof as Schedule B. Any conflicts or inconsistencies between the specifically identified assets listed above and those generally depicted in Schedule B shall be resolved in favor of the assets specifically identified and listed above. Personal Property Lot No. 1 and Personal Property Lot No. 2 shall be collectively referred to as the "Personal Property".

1.03 Easements. Subject to the terms and conditions of this Agreement, Cherryland agrees to assign to TCLP, and TCLP agrees to accept from Cherryland on the Closing Date, certain easement rights and/or other interests in real property identified in Schedule C attached hereto (hereinafter collectively referred to as the "Cherryland Easements"). Similarly, subject to the terms and conditions of this Agreement, TCLP agrees to assign to Cherryland, and Cherryland agrees to accept from TCLP on the Closing Date, certain easement rights and/or other interests in real property identified in Schedule D attached hereto (hereinafter collectively referred to as the "TCLP Easements"). The Cherryland Easements and the TCLP Easements shall be collectively referred to as the "Easements".

1.04 Personal Property Removed and/or Returned.

(a) Capacitor Banks. Cherryland and TCLP shall each remove their capacitor banks in the service areas affected by, or referenced in, this Agreement prior to the Closing Date (as defined below) or at a time mutually agreed to by the Parties and as set forth and identified in the attached Schedule E.

(b) Transformers and Meters. Cherryland and TCLP shall each remove and return to the other, those transformers and meters referenced and identified in the attached Schedule F at a time mutually agreed to by the Parties.

1.05 Accounts and Meters.

(a) Cherryland to TCLP. The retail electric service accounts and numbered meters referenced and identified in the attached Schedule G shall be transferred by Cherryland to TCLP on the Possession Transfer Date (as defined below) or as otherwise agreed to by the Parties and as set forth in section 2.02.

(b) TCLP to Cherryland. The retail electric service accounts and numbered meters referenced and identified in the attached Schedule H shall be transferred by TCLP to Cherryland on the Possession Transfer Date (as defined below) or as otherwise agreed to by the Parties and as set forth in section 2.02.

The Cherryland Accounts and Meters and the TCLP Accounts and Meters referenced and identified above shall be referred to collectively in this Agreement as the "Accounts" and "Meters".

1.06 Consideration. The Parties acknowledge and agree that the intention and purpose of this Agreement is to facilitate the exchange, transfer, conveyance and assignment of the Personal Property, Easements and Accounts for the mutual benefit of their members and customers and that the respective value of the property, interests and rights is identical, or nearly identical, and therefore, no consideration other than that which is set forth in this Agreement is necessary or required. If, for whatever reason, additional consideration is required, the Parties agree to negotiate in good faith to determine the appropriate consideration.

1.07 Other Property Unaffected. The exchange, transfer, conveyance or assignment of the Personal Property set forth in Schedules A and B and the Easements set forth in Schedules C and D and the Accounts and Meters set forth in Schedules G and H shall not be deemed to apply to or, affect any properties or operations of the Parties not expressly identified in this Agreement as being included in the exchange hereunder.

ARTICLE II DELIVERY OF TITLE AND POSSESSION

2.01 Transfer of Title. At such time of day on the Closing Date, or at a time agreed to by the Parties, as the Parties shall have delivered to each other a duly executed Bill of Sale with respect to the Personal Property and duly executed assignments with respect to the Easements, title to all Personal Property and Easements shall pass to the other and as specifically set forth in section 2.02.

2.02 Delivery of Possession of Property.

(a) Stages. The delivery and transfer of possession and custody of the Personal Property, Accounts, and Meters to be exchanged, transferred or conveyed shall be made in separate stages and sub-stages as more specifically described below and the intended delivery and transfer dates shown in the attached Schedule I to accommodate any and all requirements of the Joint Petition (as described and defined below) and to ensure the orderly exchange and transfer of facilities. Each stage will address the Parties' facilities required to provide service to their members and customers and the details necessary to facilitate the circuit modifications (and load transfers) to exchange such things as the Personal Property, Meters and Accounts.

(b) Modifications and Operations. The date on which actual delivery of possession of the Personal Property, Meters and Accounts shall occur shall be the "Possession Transfer Date". Prior to the Possession Transfer Date of Personal Property, Cherryland and TCLP shall perform

the necessary modifications to separate the electric distribution facilities constituting the Personal Property, Meters and Accounts to be exchanged and transferred hereunder and those to be removed and retained, if any. In addition to the modification work to be done by the Parties prior to the Possession Transfer Date, Cherryland and TCLP shall each, prior to such applicable Possession Transfer Date, perform any additional necessary preparations/modifications needed for the other to be able to take over and integrate the Personal Property covered thereby into their existing electric distribution systems and operations on the Possession Transfer Date. Cherryland and TCLP shall each bear their own costs and expenses for the modifications and/or preparations needed for the turnover/transfer of Personal Property, Meters and Accounts on the Possession Transfer Date. Additionally, prior to the Possession Transfer Date, Cherryland and TCLP agree to cooperate by allowing the other access to its system and facilities to effectuate and facilitate modifications, isolation, disconnections and load transfers. In order to facilitate the efficient and orderly provision of these services, Cherryland and TCLP agree to notify the other's dispatch department of the proposed work or service to be done on the other's facilities on a daily basis.

(c) Load Transfer Plan Review. Cherryland and TCLP shall prepare and propose a load transfer plan ("Load Transfer Plan") which shall be presented to the other for review, analysis and approval prior to execution of this Agreement. The approved Load Transfer Plans shall become part of this Agreement and attached as Schedule J or incorporated into Schedule I, at the election of the Parties.

(d) Accounts and Possession Transfer Date. Cherryland will cease providing electric service to the Cherryland Accounts, and TCLP shall commence providing electric service to the Cherryland Accounts on the Possession Transfer Date or at a time as otherwise agreed by the Parties. TCLP will cease providing electric service to the TCLP Accounts, and Cherryland shall commence providing electric service to the TCLP Accounts on the Possession Transfer Date or at a time as otherwise agreed by the Parties. Copies of all of a customer's/member's account information shall be given to the party that has commenced the service to that customer/member.

(e) Billing. The Meters for such members and customers to be transferred or exchanged shall be read by each party on the applicable Possession Transfer Date or as soon thereafter, as practicable. Bills for all service rendered to such member or customer, up to the Possession Transfer Date, will be presented and collected by, and all revenue therefrom will accrue to the transferring party; and bills for all electric service rendered to such member or customer after the Possession Transfer Date will be presented and collected by, and all revenue therefrom will accrue to the receiving party.

(f) Cooperation with Collections. After the Possession Transfer Date the party that has begun serving the customer/member may assist the party that has ceased serving the customer/member in collecting any bill for service unpaid by that customer/member including suspending or terminating that customer's/member's service pursuant to the electricity termination policy of the party to which the bill is owed.

2.03 Mortgage/Security Interest Release. TCLP acknowledges that Personal Property Lot No. 1 and the Cherryland Easements to be transferred or assigned hereunder may be encumbered by certain mortgages or security interests(s). Promptly after execution of this Agreement,

Cherryland shall apply for a release and discharge of said encumbrances which release(s) shall be in form and substance acceptable to TCLP and which release may be conditioned upon the Parties' obtaining the approval contemplated by Section 3.02.

2.04 Assignment of Pole Attachment Agreements. The Parties shall assign their respective pole attachment agreements with their licensees to the other for the service areas, facilities and personal property affected by this Agreement.

ARTICLE III CLOSING

3.01 Closing. The closing of this Agreement including the delivery of the Bills of Sale for the Personal Property and the delivery of the assignments of the Easements, all contemplated by this Agreement (the "Closing"), shall take place at the offices of Cherryland not later than fifteen (15) days following the later of (date to be provided here) or the approval by the Michigan Public Service Commission as contemplated by Section 3.02.

3.02 Michigan Public Service Commission Approval. This Agreement is contingent upon the Parties obtaining such approval(s) of the Michigan Public Service Commission, in form and substance satisfactory to the Parties, as each may reasonably consider necessary to carry out the transactions contemplated thereby. Cherryland agrees to prepare such an approval request, likely by and through a joint petition ("Joint Petition"), and submit such request in draft form to TCLP for its comments and agreement as promptly as practicable after the execution of this Agreement. Cherryland shall submit the agreed form of approval request to the Michigan Public Service Commission as promptly as practicable after the Parties reaching agreement on the form and content thereof.

3.03 Taxes and Fees on Exchange and Transfer of Property. To the extent Section 1.06 of this Agreement is inapplicable, in whole or in part, the Parties agree that any state and local sales taxes, personal property taxes, real estate transfer taxes and recording fees, assessed on, or by reason of, or resulting from the exchange, transfer and conveyance or assignment of Personal Property and Easements hereunder, shall, if any, and only if applicable and to the extent no exemption therefrom exists, be paid by and be split equally between the Parties per local custom. Cherryland shall cooperate with TCLP in structuring and reporting the transactions, transfers, conveyances and assignments contemplated by this Agreement to best take advantage of all exemptions which may be available to TCLP.

3.04 Personal Property Taxes. Personal property taxes levied on the property of Cherryland shall be paid by Cherryland when they become due.

ARTICLE IV REPRESENTATIONS AND WARRANTIES OF CHERRYLAND

4.01 Organization, Good Standing, and Power of Cherryland. Cherryland is a cooperative duly organized, validly existing and in good standing under the laws of the State of Michigan. Cherryland warrants that it has all requisite power to own or lease its properties and to carry on

its business in the manner and in the place where such properties are owned or leased and its business is now being conducted.

4.02 Authority and Capacity of Cherryland. Cherryland has all requisite corporate power, authority and capacity to enter into this Agreement and the transactions contemplated by this Agreement and to perform its obligations hereunder and thereunder. The execution, delivery and performance of this Agreement and the transactions contemplated by this Agreement have been duly authorized, approved and adopted by all necessary corporate action of Cherryland, including the approval of its Board, and no other corporate proceedings on the part of Cherryland are necessary to authorize this Agreement or to consummate the transactions contemplated, except the approval contemplated by Section 3.02. This Agreement has been duly and validly certified, executed, acknowledged and delivered by Cherryland and, subject to the approval of this Agreement and the transactions contemplated herein, will constitute the valid and binding agreement of Cherryland, enforceable against Cherryland in accordance with its terms.

4.03 Effect of Agreement. Neither the execution and delivery of this Agreement nor the consummation by Cherryland of the transactions contemplated herein will (a) conflict with or result in any breach of any provision of the Articles of Incorporation or Bylaws of Cherryland or (b) except as contemplated by Section 3.02, require any consent, approval, authorization or permit of, or filing with notification to, any governmental or regulatory authority.

4.04 Inspection. Cherryland acknowledges that it has examined and/or investigated and/or has had the opportunity to examine and/or investigate the quantity, quality and condition of the Personal Property to be transferred hereunder, and is satisfied with the same as of the date hereof. Cherryland shall have the right to re-inspect such Personal Property prior to the transfer of possession.

4.05 Title to Properties; Absence of Liens and Encumbrances.

(a) Personal Property. No portion of the Personal Property to be acquired by TCLP on the Closing Date shall be subject to any governmental decree or order to be sold or is being condemned, expropriated or otherwise taken by any governmental authority or entity with or without payment of compensation thereof, nor has any such condemnation, expropriation or taking been proposed. Except with respect to the mortgage and security interest(s) described in Section 2.03, Cherryland has good and valid title to all the Personal Property, in each case, free and clear of all title defects or objections, liens, claims, charges, security interests or other encumbrances of any nature whatsoever.

(b) Easements. None of the easements to be assigned to TCLP on the Closing Date shall be subject to any governmental decree or order to be sold or is being condemned, expropriated or otherwise taken by any governmental authority or entity with or without payment of compensation thereof, nor has any such condemnation, expropriation or taking been proposed. Except with respect to the mortgage and security interest(s) described in Section 2.03, Cherryland's title to all such easements is in each case, free and clear of all, liens, charges, security interests or other encumbrances of any nature whatsoever and Cherryland's title or possessory interest to any such easements has not been and is not now the subject of any

objection, claim or proceeding calling into question whether Cherryland has good and valid title or possessory interest to such easement.

4.06 Taxes. Cherryland has correctly filed all tax returns required to be filed and has paid all taxes required to be paid as shown on such returns for all taxes payable with respect to the Personal Property and the Cherryland Easements. No deficiencies for any taxes have been proposed, asserted or assessed against Cherryland with respect to the Personal Property or the Cherryland Easements that have not been fully paid. There are no liens for taxes (other than for current taxes not yet due and payable) on the Personal Property or the Cherryland Easements.

4.07 Disclaimer of Warranties. It is expressly understood and agreed that except as provided to the contrary in this Article, all of the personal property and easements to be transferred, conveyed or assigned hereunder will be transferred, conveyed or assigned to TCLP AS-IS, WHERE-IS, WITH ALL FAULTS as of the Closing Date and Possession Transfer Date. Cherryland makes no representations or warranties other than those expressly made herein as to the quality, quantity, condition, freedom from defects or, hazards of any kind, USABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR MERCHANTABILITY THEREOF or, as to any other matter with respect thereto.

4.08 Survival. The terms of this Article shall survive Closing.

ARTICLE V REPRESENTATIONS AND WARRANTIES OF TCLP

5.01 Organization, Good Standing, and Power of TCLP. TCLP is a Michigan municipal electric utility organized under the laws of the State of Michigan and Charter of the City of Traverse City and has all requisite power to own or lease its properties and to carry on its business in the manner and in the place where such properties are owned or, leased and its business is now being conducted. This Agreement is contingent upon the City of Traverse City City Commission certifying that the TCLP real property interests being transferred are not necessary for the operation of TCLP pursuant to City Charter section 179(b).

5.02 Authority and Capacity of TCLP. TCLP has all requisite municipal corporate power, authority and capacity to enter into this Agreement and the transactions contemplated by this Agreement and (subject to the approval of this Agreement contemplated by Section 3.02) to perform its obligations hereunder and thereunder. The execution, delivery and performance of this Agreement and the transactions contemplated by this Agreement have been duly authorized, approved and adopted by all necessary municipal corporate action of the City of Traverse City ("City") and TCLP and no other municipal corporate proceedings on the part of the City or the TCLP are necessary to authorize this Agreement or, to consummate the transactions contemplated (other than the approval contemplated by Section 3.02). This Agreement has been duly and validly certified, executed, acknowledged and delivered by TCLP and, subject to the approval of this Agreement and the transactions contemplated herein as contemplated by Section 3.02 will constitute the valid and binding agreement of TCLP, enforceable against TCLP in accordance with its terms.

5.03 Effect of Agreement. Neither the execution and delivery of this Agreement nor the consummation by TCLP of the transactions contemplated herein will require any consent, approval, authorization or permit of, or filing with or notification to, any governmental or, regulatory authority.

5.04 Inspection. TCLP acknowledges that it has examined and/or investigated and/or has had the opportunity to examine and/or investigate the quantity, quality and condition of the Personal Property to be transferred hereunder, and is satisfied with the same as of the date hereof. TCLP shall have the right to re-inspect such Personal Property prior to the transfer of possession.

5.05 Title to Properties; Absence of Liens and Encumbrances.

(a) Personal Property. No portion of the Personal Property to be acquired by Cherryland on the Closing Date shall be subject to any governmental decree or order to be sold or is being condemned, expropriated or otherwise taken by any governmental authority or entity with or without payment of compensation thereof, nor has any such condemnation, expropriation or taking been proposed. TCLP has good and valid title to all the Personal Property, in each case, free and clear of all title defects or objections, liens, claims, charges, security interests or other encumbrances of any nature whatsoever.

(b) Easements. None of the TCLP Easements to be assigned to Cherryland on the Closing Date shall be subject to any governmental decree or order to be sold or is being condemned, expropriated or otherwise taken by any governmental authority or entity with or without payment of compensation thereof, nor has any such condemnation, expropriation or taking been proposed. TCLP's title to all such easements is in each case, free and clear of all, liens, charges, security interests or other encumbrances of any nature whatsoever and TCLP's title or possessory interest to any such easements has not been and is not now the subject of any objection, claim or proceeding calling into question whether TCLP has good and valid title or possessory interest to such easement.

5.06 Taxes. TCLP has correctly filed all tax returns required to be filed, if any, and has paid all taxes required to be paid as shown on such returns for all taxes payable with respect to the Personal Property and the TCLP Easements. No deficiencies for any taxes have been proposed, asserted or assessed against TCLP with respect to the Personal Property or the TCLP Easements that have not been fully paid. There are no liens for taxes (other than for current taxes not yet due and payable) on the Personal Property or, the TCLP Easements.

5.07 Disclaimer of Warranties. It is expressly understood and agreed that except as provided to the contrary in this Article, all of the personal property and easements to be transferred, conveyed or assigned hereunder will be transferred, conveyed or assigned to Cherryland AS-IS, WHERE-IS, WITH ALL FAULTS as of the Closing Date and Possession Transfer Date. TCLP makes no representations or warranties other than those expressly made herein as to the quality, quantity, condition, freedom from defects or, hazards of any kind, USABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR MERCHANTABILITY THEREOF or, as to any other matter with respect thereto.

5.08 Survival. The terms of this Article shall survive Closing.

ARTICLE VI LIMITATIONS OF LIABILITY

6.01 Limitation of Cherryland's Liability. In no event, whether in contract, tort (including negligence), strict liability or under any other theory, shall Cherryland be liable for any damages for loss of use of equipment, facilities or property, claims of TCLP's customers, loss of profits capital or, borrowed funds, loss of actual or any special, indirect incidental or arising or, revenue, cost of or potential business, consequential damages arising out of TCLP's conduct of its business or provision of services for any period after the Possession Transfer Date. Cherryland shall, in addition, retain liability for all personal injury or accidents or events relating to the Personal Property Lot No. 1 and/or real property hereunder, which accidents or events occurred prior to the applicable Possession Transfer Date with respect to such personal property and/or Cherryland's Easements, regardless of whether a claim or suit relating to such accident or event is made or brought before or after such applicable Possession Transfer Date.

6.02 Limitation of TCLP's Liability. In no event, whether in contract, tort (including negligence), strict liability or under any other theory, shall TCLP be liable for any damages for loss of use of equipment, facilities or property, claims of Cherryland's members, loss of profits capital or, borrowed funds, loss of actual or any special, indirect incidental or arising or, revenue, cost of or potential business, consequential damages arising out of Cherryland's conduct of its business or provision of services for any period after the Possession Transfer Date. TCLP shall, in addition, retain liability for all personal injury or accidents or events relating to the Personal Property Lot No. 2 and/or real property hereunder, which accidents or events occurred prior to the applicable Possession Transfer Date with respect to such personal property and/or TCLP's Easements, regardless of whether a claim or suit relating to such accident or event is made or brought before or after such applicable Possession Transfer Date.

ARTICLE VII MISCELLANEOUS

7.01 Successors and Assigns. This Agreement may not be assigned without the written consent of the other party. In the event of any consented assignment permitted under this Section, the terms, conditions and obligations of this Agreement are binding upon, and shall inure to the benefit of, the respective successors and assigns of the Parties hereto.

7.02 Entire Agreement. This Agreement constitutes the entire agreement between the Parties and supersedes all prior representations, understanding, negotiations and agreements between the Parties with respect to the subject matter hereof. The terms and conditions of this Agreement shall not be changed, superseded or supplemented except in writing, signed by the Parties hereto.

7.03 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Michigan.

7.04 Dispute Resolution. Except as otherwise precluded by law, a resolution of any dispute arising out of, or related to, this Agreement shall first be pursued through good-faith negotiations in order to reach a mutually acceptable resolution. If, after negotiating in good faith for a period of at least thirty (30) days, the Parties are unable to resolve the dispute, then either party may seek resolution by exercising any rights or remedies available to either party at law or equity.

7.05 Relationship of the Parties. Nothing contained herein shall be construed to create an association, joint venture, trust, or partnership, or impose a trust or partnership covenant, obligation, or liability on or with regard to either party. Each party shall be individually responsible for its own covenants, obligations, and liabilities under this Agreement or otherwise.

7.06 Joint Drafting. The Parties acknowledge that this Agreement has been drafted jointly by the Parties and agree that this Agreement will not be construed against either party as a result of any role such party may have had in the drafting process.

7.07 Waivers. No action taken pursuant to this Agreement, including without limitation any extension of any Possession Transfer Date, by or on behalf of any party, shall be deemed to constitute a waiver by the party taking such action of compliance with any representations, warranties, covenants or agreement contained herein. The waiver by any party hereto of a breach of any provision of this Agreement shall not operate or be construed as a waiver of any subsequent breach.

7.08 Expenses. Whether or not the transactions contemplated by this Agreement are consummated, each of the Parties hereto shall pay the fees and expenses of its respective counsel and other experts, and all other expenses incurred by such party incident to the negotiations, preparation and execution of this Agreement.

7.09 Notices. All notices, requests, demands and other communications which are required or may be given under this Agreement shall be in writing and shall be deemed to have been duly given upon the earlier of delivery if delivered personally, or upon receipt if sent by registered or certified mail, return receipt requested, postage prepaid, or on the second next business day after deposit if sent by recognized overnight delivery service, or upon transmission if sent by email or facsimile transmission (with request of assurance of receipt in a manner customary for communications of such type) as follows:

- (a) If to TCLP:
Timothy J. Arends, Executive Director
Traverse City Light & Power Department
1131 Hastings Street
Traverse City, MI 49686
tarends@tclp.org

with a copy to:

W. Peter Doren, General Counsel
Sondee, Racine & Doren, PLC

310 W. Front Street, Suite 300
Traverse City, MI 49684
doren@sondeeracine.com

- (b) If to Cherryland:
Tony Anderson, General Manager
Cherryland Electric Cooperative
5930 US 31 South
Grawn, MI 49637
tanderson@cherrylandelectric.coop

with a copy to:

Greg Jenkins, General Counsel
Kuhn Rogers, PLC
412 S. Union Street
Traverse City, MI 49684
gjenkins@krlawtc.com

7.10 Section and Other Headings. The section and other headings contained in this Agreement are for reference purposes only and shall not affect the meaning or interpretation of this Agreement.

7.11 Best Efforts. The Parties hereto shall use their respective best efforts to perform all of the obligations and satisfy all of the conditions to which such party is subject pursuant to this Agreement. Each party shall keep the other apprised of any inquiries made of such party by any governmental agency or authority or members of their respective staffs with respect to this Agreement and the transactions contemplated hereby.

7.12 Counterparts. This Agreement may be executed in two counterparts, each of which shall be deemed to be an original and both of which together shall be deemed to be one and the same instrument.

IN WITNESS WHEREOF, Cherryland and TCLP have caused the execution of this Agreement by a duly designated officer as of the date and year first above written.

CHERRYLAND ELECTRIC COOPERATIVE

By: _____

Its: _____

TRAVERSE CITY LIGHT AND POWER DEPARTMENT

By: _____

Its: _____



**TRAVERSE CITY
LIGHT & POWER**

To: Light & Power Board
From: Tim Arends, Executive Director
Date: January 16, 2017
Subject: Consideration of Adopting Strategic Plan

Included in your packet is the proposed TCL&P Strategic Plan – 2017 (“Plan”) for your consideration of adoption. At the last meeting staff presented the amended Plan and sought and received Board input. The Board’s input has been incorporated in the Strategic Plan.

Recognizing that times change rapidly in the electric utility industry due to legislative issues, technology, and customer needs and expectations, the proposed Plan allows for modifications at any given time to address those changes and keep the utility moving in a forward direction.

TCL&P is an important part of the community that helps make Traverse City such a great place to live, work and play. As exemplified in the Plan, the Board, staff and employees of the utility are focused on maintaining and improving the public power utility’s significance to the community by adding value to the city, its residents and all customers.

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 ADOPT THE TRAVERSE CITY LIGHT & POWER STRATEGIC
PLAN – 2017 AS PRESENTED.**



**TRAVERSE CITY
LIGHT & POWER**

Investing Our Energy In You

Traverse City Light & Power Strategic Plan 2017



TRAVERSE CITY LIGHT & POWER

Investing Our Energy In You

Introduction from the Executive Director

After successfully serving the City and surrounding areas for 103 years, the Board of Traverse City Light & Power ("TCL&P") embarked on developing a new Strategic Plan ("Plan") that could challenge the public power utility to exceed customer expectations while meeting the ever changing challenges of the electric utility industry. Safety, high reliability, low rates, transparency, exceptional customer service and communications are among the core values of the utility. This Plan was created with these basic core values always in mind.

The purpose of the Plan is to serve as a guiding document of the Board and utility staff and to support the vision and mission of the utility by achieving goals and objectives that enhance the value of the utility to its owners and the community it serves.

This Plan is the result of a very intense six month planning process facilitated by professional industry experts and the dedicated efforts of the Board, staff, and employees. The strategic plan process outlined in the diagram below also included obtaining invaluable information from the utility's key account customers. The feedback gathered from these meetings allowed staff to better define the strategic direction of the Plan.

Going forward, the Plan provides a blueprint for strategic planning and goal setting into the future. Quarterly, the utility staff will report to the Board on its progress toward specific goals identified in the Plan. On an annual basis, staff and the Board will update the Plan to meet changes in the industry, economy, and to meet changes in customer needs and expectations. This annual review, as is required in the Strategic Plan Board policy, will enable the Plan to remain a relevant guiding document for TCL&P in this ever-changing utility industry.

Timothy J. Arends
Executive Director

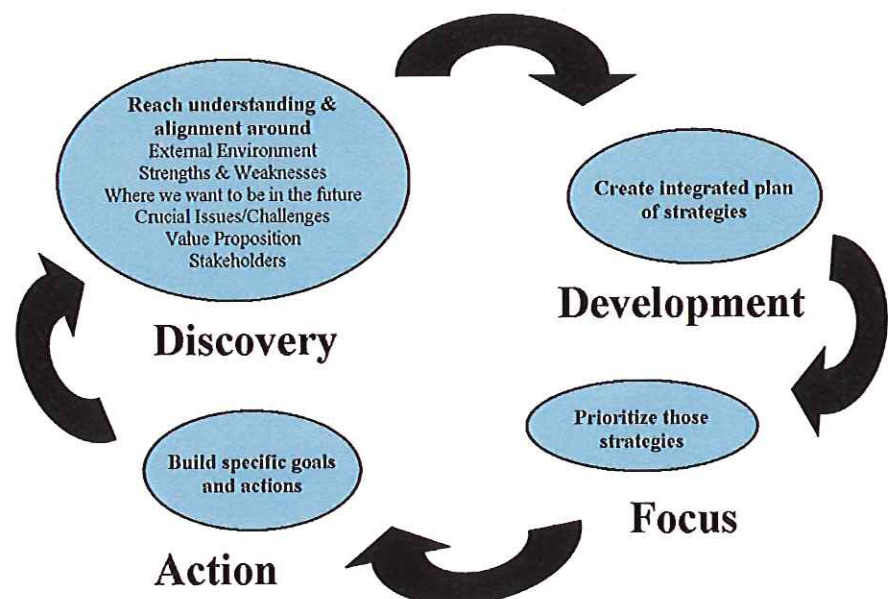


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1. Who We Are

TCL&P prides itself on being a responsive and community-friendly electric utility. The core purpose of the utility is electric service, but has grown to provide traffic signals operation and maintenance, a complimentary downtown WiFi network, a dark fiber system and street lighting, all of which enhance the quality of life and make Traverse City a better place to live, work and play as exemplified in the utility's vision and mission statements:

- **Vision Statement**

"To build the long-term value of Traverse City Light & Power for the benefit of the City and its residents and all Traverse City Light & Power customers."

- **Mission Statement**

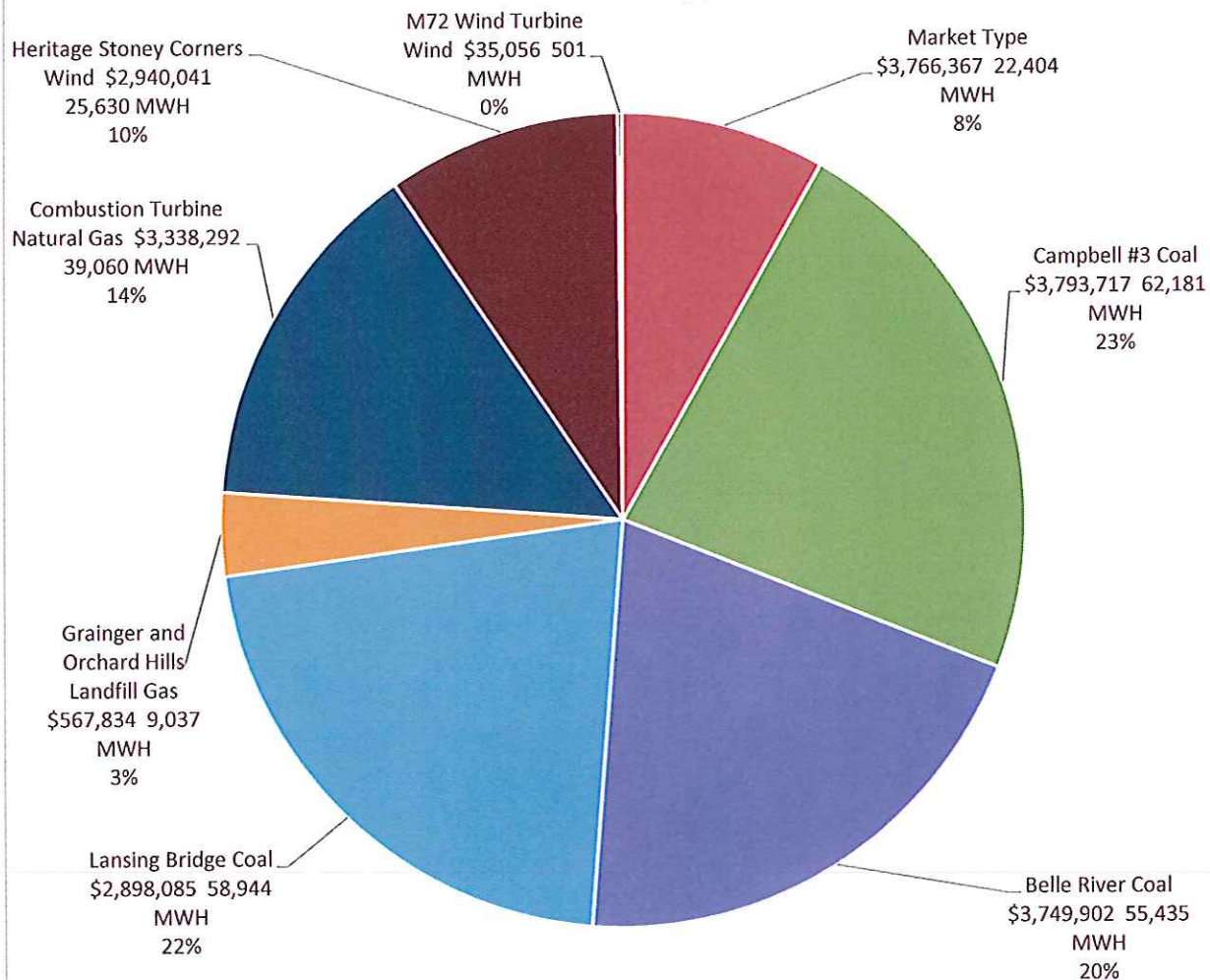
"The Mission of Traverse City Light & Power is to provide the Public Power benefits of safety, lower rates, high reliability, local control and exceptional customer service to the City and its residents and all Traverse City Light & Power customers."

TCL&P provides electric services to Traverse City and part of the outlying areas in Blair, East Bay, Elmwood, Garfield, Paradise and Peninsula Townships. The utility distributes electricity to these areas through an electrical infrastructure system consisting of three transmission substations, approximately thirty-five miles of transmission lines, five distribution substations, two hundred miles of overhead distribution lines, one hundred and fifty miles of underground distribution lines, seven thousand poles and two thousand transformers. Recent capital projects, such as construction of new transmission and distribution substations and upgrade of two key transmission lines have been completed as the utility transitions to a looped system. The result of which is increased reliability for all customers.

Currently, TCL&P is a \$36 million operation with net assets of \$70 million. The largest portion of net assets is TCL&P's investment in capital assets that are used to provide service to customers. The utility currently has no outstanding debt issuances and remains financially strong. Operations are maintained with forty full-time equivalent employees.

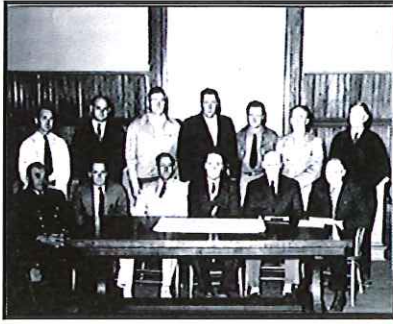
TCL&P, along with other Michigan municipal utilities, is a member of Michigan Public Power Agency ("MPPA"). The Agency was formed to acquire interest in certain electric generating plants and related transmission lines to service its members. TCL&P is able to provide reliable electric service through a diversification in purchase power contracts and ownership in various sources, a majority of which are with MPPA, as shown in the graph below.

2015-16 Fiscal Year Energy Consumption



As of fiscal year-end, June 30, 2016 the utility served an average of 12,782 customers and sold 324,833 mega-watt hours ("MWH") of electricity. 75% of the utility's customers are residential that provide 20% of the utility's revenues; conversely, 25% are commercial customers that provide 80% of the utility's revenues. An average residential customer uses 521 kWh per month, which equates to a monthly bill of \$57.90. In 2015, TCL&P surveyed the rates of forty-one utilities in Michigan, and ranked seventh lowest for residential, twenty-third lowest for small commercial, and eleventh lowest for large commercial.

Our residential, commercial and industrial customers enjoy reliable power at low rates because we are a community-owned not for profit public power utility. Public power is a collection of more than 2,000 community-owned electric utilities that serve over forty million people or about 15% of the nation's electricity consumers. Public power utilities are operated by local governments to provide communities with reliable, responsive, not-for-profit electric service. Public power utilities are directly accountable to the people they serve through local elected or appointed officials.



TCL&P is governed by a Board of Directors which was created in 1979 as a discrete component unit of the City of Traverse City and is referred to in the City Charter as a Department. A separate board was created to manage all aspects of the utility, with the City Commission approving its budget.

The TCL&P Board is a seven member board appointed by the City Commission, plus one non-voting ex-officio member, the City Manager. At least five of the seven members are non-commissioner members with five year alternating terms. One of the five may be a non-city resident, but must be a TCL&P customer. As part of the seven member Board, at least one member, but no more than two, must be a City Commissioner that serves a two year term.

In addition to the utility's budget the City Commission approves the six-year capital improvements plan, authorizes bond issues, ordinance change requests, agreements that directly impact the City, and provides for the utility's vehicle fleet needs through the Garage Internal Service Fund.

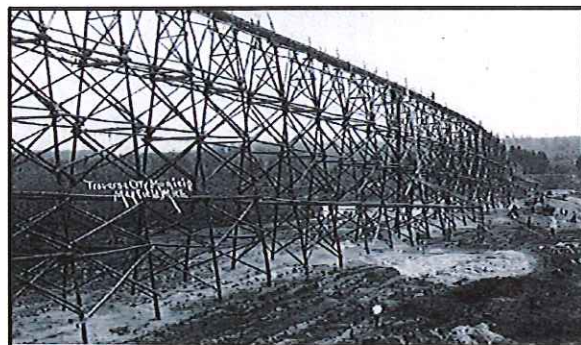
Local control, low rates and reliable service are the key pillars to providing the benefits of public power to the utility's customers and TCL&P looks forward to serving its customers with these principles for many years to come.

2. History

In the early 1900's, as demand for electric power grew in Traverse City, competition to meet this demand grew as well. The Queen City Light & Power Company was in operation only a few short years as a direct competitor to Boardman River Electric Light and Power Company. In September 1912, the City of Traverse City purchased Queen City Light & Power for \$150,000. The purchase included sixty acres at Keystone and the property and flowage rights seven miles upstream including the Brown Bridge Dam area and pond. The new power company was known as the Traverse City Municipal Light and Power Department, known today as Traverse City Light & Power Department.

In the early days of TCL&P working conditions were challenging. Linemen camped in tents and worked with teams of horses to haul poles into place. Holes were dug by hand using picks and shovels. Linemen had to manually combat the elements, especially in winter.

Attracting new commerce to the Grand Traverse area required reliable and plentiful electric power. In 1920, the Traverse City Chamber of Commerce had to pause its efforts in pursuing new businesses because of the lack of such power. Fortunately, in 1921, the construction of Brown Bridge Dam began. Once completed in 1922, the dam produced reliable energy for TCL&P for the next eighty years.



In 1928, the first steam turbine was added to the Traverse City Waterworks building, which became the site of TCL&P's coal-fired Bayside Power Plant.

In 1937, TCL&P celebrated twenty-five years of supplying electricity to Traverse City. During this time, growth had continued to drive electric demand. A second steam turbine was installed in the Bayside Power Plant with an additional capacity of 1,000 kilowatts; the largest at that time and necessary to keep Traverse City growing and thriving.

In 1948, an \$850,000, five-year expansion program for the Bayside Power Plant was approved. This new capital would allow TCL&P to purchase new equipment to increase generation capacity. Throughout the late 40's and 50's, TCL&P added new and more powerful generators, opening the way for more growth and prosperity for the Traverse City area.

Other milestones and events occurred that would further impact the delivery of electricity to Traverse City residents and businesses. In 1950, Consumers Power Company purchased all assets of the Michigan Public Service Company. In 1961, the Keystone Dam washed out due to heavy rains and extensive flooding of the Boardman River. That dam was never rebuilt.



In 1964, the city explored the possibility of expanding the Bayside Power Plant at a cost of \$3.5 million. In 1965, voters approved the expansion by an over 2-to-1 margin and construction began. In 1967, the Bayside Power Plant expansion was completed. The peak of the new addition was almost ninety-nine feet; roughly the height of the top of the historic Park Place Hotel. The height was necessary to house the overhead coal conveyor and handling system.

During the blizzard of 1977, work crews had to brave snow depths of eighteen inches and more to restore power. Fortunately, because TCL&P had locally generated power, TCL&P customers had plenty of power for their consumption needs during that tough winter, while other major Midwest utilities had to ask customers to cut down on their consumption. The utility hit a lifetime peak production of 22,200 kilowatts on January 19, 1977.

In 1976, as the electric utility industry and how it operated had become more complex, the City Commission established an ad hoc committee to study the advisability of establishing a separate TCL&P Board. In January 1977 the ad hoc committee submitted its recommendation to create a two-year TCL&P Advisory Board which was approved by the voters in April 1977. In 1979 the TCL&P Advisory Board submitted a draft charter amendment to the City Commission, a public hearing was held, and the City Commission approved putting the draft charter amendment on the next ballot. After much analysis and public input, the voters approved the creation of the TCL&P Board on April 2, 1979.

In 1981, the Department of Natural Resources ("DNR") and TCL&P began discussing the development of a Fish Management Plan for the migratory fish, primarily salmon, that ran up the Boardman River each fall. After numerous meetings and approvals of the City Commission, the Michigan DNR, the Natural

Resources Committee and the TCL&P Board, the Boardman River Trap and Transfer Harvest Facility was approved. The facility, located east of Hall Street, was completed in 1987.

In 1988, TCL&P held its first annual tree seedling giveaway at the Bayside Power Plant in celebration of Earth Day. Seedlings were given away to customers and local community groups.

1996 was a major milestone year for TCL&P. The utility, long committed to exploring renewable energy sources, pioneered the first utility grade wind turbine in Michigan. The turbine was installed on M-72 and was, at the time of installation, the largest utility grade wind turbine in the United States.

Prior to the installation of the M-72 wind turbine, TCL&P developed the Green Rate. This rate allowed customers to voluntarily pay more on their monthly utility bill. The money collected went towards paying for the wind turbine, thereby supporting renewable energy. The Green Rate was the first of its kind in the country and is now used as a model nationwide.

As the new millennium approached, TCL&P was on the cusp of significant changes and innovations. In 2002, TCL&P, along with four other municipal electric utilities, participated in the Michigan Public Power Agency's natural gas-fired combustion turbine project in Kalkaska, MI. The project continues to provide reliable energy to the electric grid during peak demand times in the summer and winter months.

In 2005, the Bayside Power Plant (located in Traverse City's "Open Space" on West Grand Traverse Bay), which had been relegated to a lesser role of peak power support, was removed. Parts of the plant were sold to a Honduran company that planned to reassemble the power-generating portion of the plant in Guatemala.



In the fall of 2006, the license to generate electricity at the Boardman, Sabin and Brown Bridge dams was surrendered to FERC. The Brown Bridge Dam was removed in 2013 with plans to also remove Sabin and Boardman dams in the near future.

In response to Michigan Public Act 295 legislation, in 2009 TCL&P contracted to purchase all generation output from five, two-megawatt wind turbines located in McBain, MI. In the fall of 2010, when all five turbines were operational, TCL&P had the highest percentage of renewable generation to total generation of any utility in Michigan.

Also in 2010, stemming from TCL&P's announcement to construct a biomass generation facility, a ballot proposal was approved by voters to amend the City Charter to provide that any decision to build or acquire a power generation facility shall be subject to a referendum of city resident voters.



In 2012, TCL&P celebrated its 100th Anniversary. TCL&P's focus remains much the same as it has over its many years of service, providing customers with safe, reliable and affordable electricity.

In March of 2012, TCL&P experienced one of the worst winter storms in the utility's history. At the peak of the storm, approximately 8,000 of TCL&P's 11,500 customers experienced outages. Due to the extent of the storm, TCL&P enacted a mutual aid agreement to request assistance from other electric utilities to help in the restoration effort. This was the first time in utility history that TCL&P requested mutual aid. Crews from Lansing Board of Water & Light, Grand Haven Board of Light & Power, Zeeland Board of Public Works, Lowell Light & Power, Trees Inc. and NG Gilbert responded and provided assistance. All TCL&P customers were restored within three days of the initial storm while some customers in the surrounding areas experienced outages for more than one week.

In the spring of 2013, TCL&P partnered with Cherryland Electric Cooperative to offer the first Community Solar Project in Michigan. The project allowed TCL&P customers to purchase a SUN Share (one solar panel) in the project and receive a monthly bill credit equal to the amount of energy produced by their share. In addition to the project being the first in the State of Michigan, it was also the first such partnership in the United States between a municipal and cooperative utility.

Also in 2013, after 18 years in operation, the TCL&P Board approved the decommissioning of the TCL&P wind turbine located on M-72 after a series of mechanical failures and unsuccessful attempts to repair the unit.

In December of 2014, TCL&P signed over ownership of the M-72 wind turbine to Heritage Sustainable Energy, LLC, owners of Stoney Corners Wind Farm in McBain, MI and entered into a Power Purchase Agreement to buy the output of the turbine.

In April 2014, TCL&P collaborated with the Downtown Development Authority ("DDA") to provide a complimentary WiFi internet service to the public within the DDA's jurisdiction. The DDA desired to have this secure municipal network to provide electronic parking services. TCL&P is responsible for installing and maintaining the WiFi system with the DDA reimbursing TCL&P for the costs. TCL&P will be fully reimbursed in 2025.

In February 2015, TCL&P received the prestigious RP3 platinum designation by the American Public Power Association ("APPA"). RP3 is APPA's program to encourage public power systems to demonstrate basic proficiency in four important disciplines: reliability, safety, workforce development and system improvement. TCL&P had previously been awarded the gold designation in 2013.

On Sunday, August 2, 2015, a severe storm caused widespread outages to approximately 5,000 TCL&P customers. Due to the extent of the damage done to TCL&P's electrical system, and the number of customers without power, TCL&P immediately called for mutual aid assistance from partnering utilities. Lowell Light & Power, Marquette Board of Light & Power, Lansing Board of Water & Light, Grand Haven Board of Light & Power, Zeeland Board of Public Works and Penn Line Service responded to the mutual aid request and assisted TCL&P for several days. A majority of TCL&P's customers had power restored by August 7, with the remaining handful needing the assistance of an electrician to complete power restoration. During the restoration process, TCL&P, and the multiple mutual aid crews, did not experience any safety incidents.

As of June 2015, TCL&P placed in service the East Hammond Substation to increase reliability of the transmission system and meet FERC reliability standards. The overall project cost was approximately \$7.3 million when encompassing the related joint transmission line construction projects with Consumers Energy.

As of January 2016, TCL&P placed in service the South Substation to increase reliability of the distribution system in order to handle the load growth from 1987 when the last substation was constructed. Overall the project cost was approximately \$5 million.



3. Understanding the Current Utility Environment

The energy landscape and traditional utility service delivery model is changing as a result of the emergence of new products, services, technologies, evolving workforce and increasing regulation.

Today's customers covet instant and constant communication. These communications cover real time information regarding outages, consumption patterns and billings. Customers look to the utility to provide this information through a wide variety of channels such as social media, phone apps, e-newsletters and text messaging. It is the expectation of the customer that these value added benefits will be provided at no cost.

Offering these new technological communication avenues does come at an additional cost to the utility due to software, staffing and subscription fees. TCL&P's current customer base is comprised of a large generational spread which requires the utility to maintain the traditional customer service model while also meeting the demands of new customer preferences.

Not only are customers seeking information regarding their electrical use, they are also wanting to take charge of their usage. For TCL&P today, it is becoming more common that the utility receives requests from customers to install and generate their own power at a financial benefit to them. With the installation of a customer owned system, the traditional service the electric utility provided, which served as the primary feed, is now becoming the customer's secondary source for electric power.

TCL&P's distribution system was not designed to accommodate multiple distributed generation sites. These sites will impact the reliability of the system in having generation feed into the grid at multiple points. This creates the need for TCL&P to invest time and money in additional capital system upgrades to ensure the same level of reliability for all customers. Regardless of these distributed generation sites,

TCL&P still has to maintain the system's infrastructure assets (substations, poles, transmission and distribution lines, etc.) for those customers when called upon as the secondary source. The cost of maintaining that infrastructure needs to be passed onto the customer irrelevant of their use. While the utility has to address the current customer desire for distributed generation, TCL&P must also plan for the next era. Energy storage is on the horizon and the utility expects it will have similar system and financial impacts that TCL&P is experiencing today with distributed generation.

Just as customers are evolving, so is the utility's workforce. TCL&P faces significant changes as 24% of the experienced workforce are eligible to retire in the next five years. Emerging technologies will also change the nature of utility operations, requiring new investments and training requirements. As a result of these trends, public power utilities will need to attract the next generation of workers with new skills, and must be able to offer career opportunities for current and incoming workers interested in technology, innovation, and customer service.



TCL&P will be required to develop resources to address workforce challenges, attracting and retaining new people to the industry, succession planning including knowledge transfer from departing employees and training for new employees in relevant areas, including new technologies and services.

Advancements in technology are driving change within the electric utility industry, specifically the amount of data technology is able to provide to the utility. The volume of data created by technology offers tremendous opportunities to mine both customer and operational related information.

Effective mining of this data can enhance preventative maintenance and storm response capabilities. However, it requires significant storage abilities and data analytics tools in order to use this information for proper decision making.

Technology also brings the need for defense against cyber security threats. The threat landscape continues to evolve and become ever more challenging, requiring constant attention and appropriate adjustments to the utility's defense strategy. In addition, there are many legislative and political challenges that require the attention and engagement of the utility.

In addition to the political challenges technology creates, there is also uncertainty among utilities regarding the federal and state legislative direction including many issues such as EPA's clean power plan, tax exempt financing, renewable energy, energy optimization, net metering, right to serve and customer choice.

The utility has already been impacted by past legislative actions including Public Act 295 which was signed into law on October 6, 2008. The Act, known as the Clean, Renewable and Efficient Energy Act, established a Renewable Energy Standard for all utilities in the State of Michigan. This Renewable Energy Standard requires Michigan electric providers to achieve a retail supply portfolio that includes at least 10% renewable energy by 2015.

The governor signed into law new energy legislation in December 2016 to ensure Michigan has sufficient generation capacity, as several coal-fired plants are planned to close in the next several years. The legislation also modifies requirements of Public ACT 295, specifically, the amount of energy Michigan would need to generate from renewable sources from 10 to 15 percent by 2022, and energy efficiency is now referred to as energy waste reduction. The 1 percent cap was removed and increased to 1.5 percent or higher.

Another large impact to the utility caused by federal regulations is the decommissioning of various coal-fired plants within the state of Michigan. The utility has already made steps forward and continues to be proactive in planning for potential generation replacement. As it has in the past, meeting future mandates could financially impact the utility. But with proper planning and involvement with the legislative process, TCL&P hopes to mitigate the financial risks.

4. Strategic Issues

At the beginning of the strategic planning process, the Board and staff participated in focused planning sessions to identify the top priorities of the utility now and into the future. Below is a summary of the six Strategic Issues that were identified through this process. In the following pages, each will be discussed further to show how the Strategic Issues impact the utility.

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

4.1 Financial Stability

Financial stability is an important strategic issue because it is the function that allows the possibility for the goals to be achieved in every other strategic issue. It is not the sole function, but one that is necessary. Additionally, with management being financially responsible and transparent of its operations, it ensures the public's trust to continue with the strategic plan goals set forth by management and approved by the Board. The areas focused on for this strategic issue include:

- Provide transparent communications on the financial health of the organization.
- Maintain the public's trust by being accountable at all levels of management.

The Operating Strategy for Financial Stability is to:

“Maintain positive operating cash flows and adequate capital reserves to sustain the financial health of the utility.”

Three main Business Goals were identified to sustain and improve TCL&P's Financial Stability:

1. **Review current workplace flows for efficiency enhancement through new developed process and procedures that will provide a proper planning environment and execution process for utility projects. (ON-GOING)**
Workplace flows at times may become complacent and it is beneficial for staff to hold brainstorming sessions to develop new processes and procedures that will lead to efficiencies within the organization. Included within the brainstorming sessions, staff will develop and implement a plan to incorporate the newly developed processes and procedures and continually monitor on an annual basis for improvement.
2. **Develop and implement rate structures to promote financial stability while keeping in mind the impacts of environmental regulations, increased energy efficiency and distributed generation (ON-GOING)**
The electric utility industry is in a new era of EPA regulations that may affect all types of generation including causing aged coal plants to be decommissioned, utilization of energy

efficiency programs along with new and improved technologies (renewable generation and battery storage) installed at the customer level reducing the overall customer usage and demand. Additionally, the utility may be incorporating new technologies such as AMI that allows for significant data collection for multiple benefits (energy efficiency, demand side management, distribution network management, improved data quality and accurate billing). Even with all of these impacts, the utility will be committed in providing competitive and equitable rates to their customers.

3. **Develop an internal cost of service study to provide staff a resource tool for the purpose of concurring with the study performed by a third party and to allow for internal analysis and understanding of implications of different modifications to utility rate tariffs.**

The utility at the recommendation of Hometown Connections will continue to conduct a rate and cost of service study every three to five years, performed by an independent, outside entity. However, staff believes it is in the best interest of the utility to perform a cost of service study to compare results with the independent cost of service study to ensure accuracy and agreement of assumptions used in the cost of service study while providing staff a tool to perform different analysis on rate structures and understand the implications.

4.2 Power Supply Strategy

Power Supply Strategy is an important strategic issue because it represents 70% of TCL&P's operating costs and impacts Traverse City's local economy through the utility's rate structure. With industry experts providing knowledge to the Board and staff through planned education sessions, the utility is able to make knowledgeable decisions regarding TCL&P's power supply future. Having a diverse portfolio and implementing state and Board requirements, including energy efficiency and renewable energy, allows the utility to be in regulatory compliance while not at major risk with only one fuel source. The areas focused on for this strategic issue include:

- Manage load growth through energy efficiency programs.
- Create a diversified cost-effective generation portfolio.

The Operating Strategy for Power Supply Strategy is to:

"Ensure sufficient power supply in a fiscally responsible manner."

Five main Business Goals were identified to sustain and improve TCL&P's Power Supply Strategy:

1. **Implement recommendations from the Energy Optimization Program Planning Report that are in the best interest of the utility to achieve energy savings that manage load growth and are aimed at reducing on-peak demand, while also exploring other opportunities that may achieve the same results, but are not outlined in the report. (ON-GOING)**

Knowing that *"the lowest cost energy is the energy that is saved,"* TCL&P has developed a plan outlining opportunities that have the biggest impacts on the utility and make financial sense. The utility will continue to focus special efforts on ways to optimize energy efficiency program offerings that directly manage load growth, therefore reducing the amount of capacity needed and reducing or shifting on peak demand to off peak.

2. **Implement recommendations from the IRP report. (ON-GOING)**

The IRP will be updated with the latest actual information and review and update recommendations for power supply purchases going forward. The utility will continue to work through the Michigan Public Power Agency to strategically structure purchases to allow for flexibility while insulating customers from the volatile power market.

3. **Investigate generation opportunities that complement the power supply mix. (ON-GOING)**

In combination with the state's new energy plan, the utility will work with the Michigan Public Power Agency in evaluating future power supply opportunities that provide stability in rates, while diversifying the power supply portfolio of the utility.

4. **Develop a long term plan for the energy efficiency program.**

Staff recognizes that a long term strategy needs to be developed on how to evolve this program in the future towards more of a non-incentive based program by embedding it through the construction code requirements while finding a way to measure the effectiveness of these efforts.

5. **Investigate renewable generation opportunities in a fiscally responsible manner to achieve or exceed State mandates.**

The State's recent legislation signed into law mandates the utility resources from renewable generation increase from the current 10 to 15 percent by 2022. The utility will work with the Michigan Public Power Agency in evaluating power supply opportunities that are cost effective within the utility's energy portfolio while meeting or exceeding the State mandate.

4.3 System Reliability & Power Quality

System reliability is the utility's plan that will help analyze and select system improvement projects based on a rating system of several criteria to increase the utility's reliability. TCL&P will be working closely with other city departments, utilities, and customers in order to maximize the effect of the project with joint construction efforts. The areas focused on for this strategic issue include:

- Enhance and develop new system maintenance programs.
- Define and implement system improvement strategies.
- Improve communication processes with customers, other utilities and city departments.

The Operating Strategy for System Reliability is to:

“Take a proactive approach to maintain a high level of system reliability in a cost effective manner.”

Five main Business Goals were identified to enhance TCL&P's System Reliability & Power Quality throughout the electrical system:

1. **Annually review, enhance and develop system maintenance programs ensuring Average Service Availability Index (“ASAI”) remains above 99.970%. (ON-GOING)**
ASAI is the ratio of the total number of customer hours that service was available during a given time period to the total customer hours demanded (in 2015 it was 99.990). TCL&P plans to continue with its circuit rehabilitation program in 2016 with circuit BW-31. TCL&P has begun to implement inspection programs throughout the system from poles to pad mount cabinets. This data will be used as criteria within the rating system to determine which areas are in most need of maintenance.
2. **Annually review and enhance the rating system that prioritizes capital system improvements. (ON-GOING)**
This system will be utilized annually in the utility's capital improvements project planning process. The system will help staff and the board prioritize projects over the next six years with the goal of increasing system reliability, accessibility and power quality to TCL&P customers.
3. **Coordinate construction projects between TCL&P, other city departments, and other utilities. (ON-GOING)**
TCL&P will continue to work with City departments through the City's annual capital improvements process in coordinating City and TCL&P capital projects. This coordination will create efficiencies and less inconvenience to ratepayers through the construction process. TCL&P will also work with other area utilities such as cable and telephone to coordinate projects. This is especially important when it comes to undergrounding as available right-of-way is limited in some areas. It is a priority of TCL&P to maintain communications with affected customer through e-newsletters, neighborhood meetings, direct mailers or door hangers regarding upcoming projects and throughout construction.

4. Formalize written switching and tagging procedures. (ON-GOING)

Switching and tagging procedures are a written set of instructions used to de-energize, energize or transfer load between equipment and or substations. Following these written instructions minimizes the risk of unnecessary outages, damage to equipment and helps ensure the safety of employees involved. Formalizing these procedures will ensure completeness and uniformity in the preparation of switching orders as well as the actual switching and tagging conducted in the field.

5. Perform System Wide Sectionalizing Study.

Sectionalizing in an electric utility refers to protective devices (fuses & relays) working in a coordinated manner such that the minimum number of customers experience interruptions in electric service for system disturbances. This coordination includes distribution, substation, and transmission protective devices and is in large part dependent on system short circuit currents at all points in the TCLP system. The result of this initiative will be an increase in reliability for TCLP customers and has a direct correlation with goal 4.3.1 which addresses Average Service Availability Index (ASAI).

4.4 Technology

Technology plays a valuable role within all strategic areas and is at the forefront of the electric utility. In recent years, technical innovation has become a leading factor in modernizing the face of the electric utility by creating efficiencies within all aspects of the business. Therefore, it is necessary to embrace technology as a strategic issue. The areas focused on for this strategic issue include:

- Ensuring security for the integrity of the utility.
- Implementing energy efficiency technologies.
- Maximizing operational efficiencies.
- Enhancing communications.
- Keeping abreast of future technology opportunities.

The Operating Strategy for Technology is to:

“Embrace technologies for the benefit of the customers and community.”

Seven main Business Goals were identified to sustain and improve TCL&P’s Technical efficiencies:

1. Continue to progress the utility’s Geographic Information System (GIS).

As technology enhancements continue to increase productivity at electrical utilities, GIS continues to be at the forefront of these enhancements. As such, TCL&P is investing a considerable amount of time and energy into ensuring our GIS System is accurate and up to date. This year, Staff will be implementing an application known as Collector. This application will streamline field collection data of assets and automatically import information into the GIS environment.

2. Investigate a Fiber to the Premise (FTTP) Infrastructure.

TCL&P is currently undergoing a feasibility study and business plan to fully understand the impacts of deploying such a service to the community. The Board and Staff are currently in the process of educating themselves regarding the benefits and appropriateness for TCL&P as a potential business venture to diversify the electrical portfolio offering of the utility.

3. Investigate and implement a lit fiber network and rate for an additional service offering to dark fiber.

TCL&P currently offers dark fiber leases to the community. As an additional service, TCL&P would partner with existing Internet Service Providers (ISP) in the area to allow reselling lit fiber to customers. This is a low cost solution to help expand broadband connectivity throughout the community and take advantage of TCL&P’s existing fiber network.

4. Update the utility’s Supervisory Control and Data Acquisition (SCADA) System to current technology. (ON-GOING)

The new SCADA systems are designed from SQL database and web-based deployment and are much more convertible than the existing system TCL&P has today. Integrating the current SCADA technology ensures that as system updates and advances in functionality are needed TCL&P will be able to accept those updates seamlessly.

5. Implementation of the Advanced Metering Infrastructure (AMI). (ON-GOING)

TCL&P is looking to deploy an AMI network. There are many different reasons and benefits that a utility would look to gain in doing an AMI project. The Board and staff are currently in the process of going out for bid on this project. Completion will result in advancement of several different areas of the strategic plan objectives.

6. Safeguard the utility from cyber threats to stay current with industry standards. (ON-GOING)

The cyber security threat environment is one that is constantly changing and evolving rapidly. The Federal Energy Regulatory Commission (FERC) and National Electric Reliability Commission (NERC) have guidelines and standards to follow for cyber threats. By following these guidelines TCL&P will maintain an electric system that is highly reliable against cyber intrusions that could affect TCL&P customers. On the business side, examples of cyber threats include data theft, denial of service attacks, website defacement and customer information disclosure or privacy breaches. On the operations side, cyber threats could target the generation and delivery of power. The greatest threat to electricity delivery is a sophisticated and coordinated cyber-physical attack on the operations side aimed at causing regional power outages. TCL&P will continue to adapt and follow guidelines provided by NERC and FERC to ensure system reliability.

7. Effectively implement technology that will communicate pertinent utility information with customers. (ON-GOING)

Technology will continue to be an evolving tool to better communicate with customers.

Continuous feedback will be obtained through communication efforts to determine the most appropriate methods. However, this year we will be finalizing the IVR system with enhancements that allow for automatic recognition of customer addresses. During this process we will be working towards obtaining updated contact information. This will then be followed by implementation of texting and smart phone applications.

4.5 High Quality Workforce

TCL&P recognizes the value and importance of employees who are an essential component to the successful operations of the utility. Promoting and encouraging a high quality workforce needs to continue and strengthen in order to ensure that TCL&P provides excellent service to its customers and community. The areas focused on for this strategic issue include:

- Maintain a safe work environment through collaborative efforts between management and the union.
- Foster a work environment that encourages professional development for the betterment of the organization.
- Ensure the organization's efforts attract and retain qualified candidates.
- Communication throughout the organization that will allow for transparency, accountability, trust and respect amongst management and union employees.

The Operating Strategy for High Quality Workforce is to:

“Create and maintain an organizational culture that empowers and educates employees with the end result being a safe, motivated, and highly skilled workforce.”

Four main Business Goals were identified to sustain and improve the quality of TCL&P's workforce:

1. **Continue engaging in efforts towards employee professional development and performance management in order to ensure that the workforce has the knowledge, skills and abilities to evolve in their positions and are accountable in the work being performed. (ON-GOING)**
For 2017, individualized professional development plans will be created for each employee. One-on-one meetings will be held to receive feedback about future goals within the utility and discuss and develop an education plan that will help in reaching those goals.
2. **Continue to engage employees on issues facing the utility through communications efforts that are effective. (ON-GOING)**
TCL&P will continue working on implementing techniques that effectively communicate information internally. In addition to more traditional approaches, technology has and will continue to be utilized which will require ongoing training of employees.
3. **Modify and enhance recruitment strategies, selection techniques and retention efforts to ensure that the utility is successful in attracting and retaining qualified candidates.**
Staff will focus attention on modifying current processes to include implementation of applicant testing. We will also research and determine the “value” employees place on benefit offerings based on varying life circumstances for both recruitment and retention.

4. **Continue to promote employer and worker awareness of, commitment to, and involvement with safety to affect positive change in the workplace culture through cooperative efforts and strong leadership. (ON-GOING)**

Staff will continue to implement the actions and objectives identified in the Safety Development Plan. Included in this is a review of the revised APPA Safety manual, to be released in early 2017, along with training on the National Electric Safety Code. Staff will also continue to share resources to promote safety within our community.

4.6 Customer Satisfaction

Although Customer Satisfaction is affected by all of the previous Strategic Issues identified in this Plan, there are many ways for the utility to encourage, track, and modify the way services are provided to customers that will assist in striving for a high level of customer satisfaction. The areas focused on for this strategic issue include:

- Maintaining a high level of customer service.
- Improving current and developing new communication avenues with customers.
- Providing a variety of value-added programs to customers.
- Strengthening partnerships for the betterment of the community.
- Ensuring lowest rates possible while meeting customer expectations.

The Operating Strategy for Customer Satisfaction is to:

“Sustain and improve the utility’s goodwill to all customers by going the extra mile.”

Five main Business Goals were identified to sustain and improve TCL&P Customer Satisfaction levels:

- 1. Maintain a customer satisfaction rating above 95%. (ON-GOING)**
The 2016 Customer Satisfaction Survey reported 98% overall satisfaction with TCL&P services. The utility will continue to monitor the pulse of both its customers and community through quarterly outage surveys and implementation of automated phone surveys following customer service interaction to ensure we remain at or above this threshold.
- 2. Maintain customer rates lower than other utilities in the area. (ON-GOING)**
It has been communicated to staff by the Board that it is important to keep rates low when compared to other utilities within the local area as this is an important benefit of being a public power utility. TCL&P will measure the utility’s success in this area by completing a biennial rate survey of utilities throughout the state, and by completing a cost of service study no less than every five years to be used for a rate analysis. If this goal is not achievable or financially feasible, an explanation will be provided to the board and the operations or the goal will be revised.
- 3. Continue to evolve the utility’s communications efforts and community involvement (ON-GOING)**
Staff will utilize the results of the 2016 Customer Satisfaction Survey to research and implement communication channels outlined in the survey as most effective. However, communication channels are only effective when the message is timely and clearly written. Therefore, staff will draft an external communications procedure that will include guidance on when, how and what to communicate for instances such as planned outages, neighborhood projects and community wide announcements.

4. **The utility will begin to formulate a plan to address the evolving needs of its customer. (ON-GOING)**

Utilities of the future need to be more than just a provider of energy. They need to provide the tools necessary to empower the customer to be in charge of their energy future. This plan will include program options, implementation of technology outlined in the Technology Strategy and the timeframes for completion.

5. **Continually evaluate and implement services focused on assisting the unique needs of the utility's key account and critical service customers. (ON-GOING)**

Key account and critical service customers represent some of the utility's largest consumers and most impactful from a community service standpoint. Although all customers are of value to TCL&P, the distinct needs of this customer group require additional attention from staff due to the level of electrical consumption and the economic impact of their business on the greater community. Specific programs will be analyzed and implemented to assist these customers to successfully do business in the Traverse City region.

5. Conclusion

The fundamental purpose of TCL&P's strategic planning process was to identify, consider and act on the internal and external issues that are expected to have the greatest influence on TCL&P's ability to successfully achieve its vision and mission in the future.

Staff will provide quarterly updates to the Board on its progress towards implementing and/or achieving the identified goals. As the utility moves forward, this Plan will be used as a guide for future strategic planning.

Annually, the Board and staff, through the budgeting process, will review and update the Plan as necessary to reflect changing Board and customer expectations of its public power utility. The utility must stay in-tune with the evolving electric industry, economic conditions, and customer expectations. The strategic issues of today including financial stability, power supply strategy, system reliability and power quality, technology, high quality workforce, and customer satisfaction may not be the strategic issues of the utility in the future. It is the intent of TCL&P staff and its Board that this Plan be modified from time-to-time to remain relevant and useful in managing the utility.

TCL&P has a very long and proud history of serving the electrical needs of the Traverse City community. The utility looks forward to implementation of this Plan for the betterment of the City of Traverse City, its residents and all TCL&P customers.





**TRAVERSE CITY
LIGHT & POWER**

To: Light & Power Board
From: Karla Myers-Beman, Controller
Date: January 16, 2017
Subject: Annual report

One goal within the initial strategic plan was for the development of an annual report that will provide a simplified report including financial, summary of accomplishments and benchmarking information for the utility's customers and other potential interested parties. Included in the board packet for your review is the third annual report since this goal was established.

Like last year, staff plans on submitting the annual report into APPA's annual program evaluation of municipal public power agency's annual reports in August. As of this writing we have not had any correspondence regarding last year's submission. Additionally, staff will make this report available on the utility's website and a hard copy will be provided to the library and at the reference desk.

I would like to thank and give credit to Kelli Schroeder, Manager of Human Resources and Communications, for her assistance in developing this report.



TRAVERSE CITY
LIGHT & POWER

2015-2016 Annual Report

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

West Transmission Line Upgrade Project

2015-2016 Annual Report | 1

Our Message

As we write this piece, the State of Michigan recently approved new energy legislation with three overarching principles, reliability, cost-effectiveness, and environment friendly. These very same principles have been at the core of discussion for Traverse City Light & Power (TCL&P) at both the staff and board levels through various topics such as future generation capacity, cost effectiveness and reliability, renewable energy within the generation portfolio, and the evolution of the utility's energy optimization program.

Not all of the modifications to the law are applicable to the municipally owned utility. However, for those that are not, we may see some become guidelines in the future depending on the direction of the governance board.

In addressing the three overarching principles of reliability, cost-effectiveness and environment friendly, the legislation requires utilities regulated by the Public Service Commission to develop an integrated resource plan ("IRP"). This Plan will include energy waste reduction (formally known as energy optimization or efficiency) and demand response programs, while issuing request for proposals prior to submission of the IRP for new supply side generation within the State of Michigan as a means to manage current and properly plan for future load growth in the State of Michigan. Additionally, the mandate of the 1.0 percent kWh savings for energy waste reduction programs based on kWh sales was removed and changed to a financial incentive format for utilities that exceed certain percentages such as 1.5 percent. The renewable energy generation requirement gradually increases from ten to fifteen percent by 2022. Existing net metering customers were grandfathered into the current program. However, a planned study for a proposed tariff to charge a standby use of the utility's distribution and transmission system may apply to future net metering customers dependent on the outcome of the study.

The changes listed above are not all inclusive of what is being required by the new law, but rather represent some of the similar challenges that the utility has faced over the last year at the local level. These challenges are continually being addressed at TCL&P with examples that include; analyzing, with assistance from the Michigan Public Power Agency, current energy and capacity needs while evaluating new renewable power supply opportunities and the impact it has on the current generation portfolio; completion of a report on the utilities energy waste reduction program providing information as to the best cost effective programs for the utility; inclusion in the strategic plan the evolution of the energy waste reduction program; the development of the avoided solar cost rate to be used to evaluate future net metering agreements once the current subscription is filled; and the possibility of future purchase power agreements.

The challenges facing utilities, whether municipally owned, a cooperative or investor owned, are similar in many ways as the industry evolves. Please know that the issues that arise at the State level are being addressed at the local level simultaneously, while keeping the rate payer at the forefront of all discussion. And as always, TCL&P is specifically committed to providing the public power benefits of safety, lower rates, high reliability, local control and exceptional customer service.



Jan Geht
Board Chairperson



Timothy Arends
Executive Director

Our Year

Safety

The 2015-2016 fiscal year was yet another good year for safety. The utility, again this year, had only one minor lost time accident as a result of a lower back strain. This consistent low rate of incidents is a reflection on the efforts of employees to make safety a number one priority at the utility.

Reliability

The utility invested approximately \$124,690 in normal routine tree trimming this year. A properly maintained right of way significantly reduces the length and occurrence of outages. The utility's ASAI index (total of customer hours available divided by total customer hours demanded) in 2015 was 99.99%.

This year the utility was able to complete a major upgrade project, West Side Transmission Line. This project being one of the final pieces the utility needed to have a complete looped transmission system, along with three reliable sources of electrical power to the utility's distribution system, two from the south, one from the east and one from the west. As this project was near completion the utility was able to obtain approval for the next transmission line upgrade project, LaFranier Barlow Transmission Line Upgrade.

In January 2016 the utility placed in service the South Substation. The South Substation was constructed to shorten distribution circuits and offload significant load in that area from the existing four distribution substations to improve system reliability.

Financial

The utility developed an avoided solar cost rate to develop the value of solar generation to TCL&P. This will be used in the future to evaluate solar purchase power agreements and net metering agreements once the current subscription is filled.

Generation

The utility continues to work in conjunction with the Michigan Public Power Agency (MPPA) on seasonal purchases, firm energy contract purchases, develop a long-term capacity purchase program, a renewable energy program, and acquire mid-range capacity.

Most recently, the Board committed to purchasing 3.6 MW of wind energy in the thumb area through MPPA. The approval of this contract will allow the utility the ability to comply with the new State of Michigan 15% renewable generation mandate.

Technology The utility has significant technology projects and do not expect this to change in the near future as everything revolves around utilizing technology to stream line and make processes more effective and efficient.

Technological projects commencing during the year include a new work order asset management program, upgrades to the GIS System electric system model, implementation of an IVR Response program, and installation of new security cameras at all locations where critical assets reside.

AMI discussions with the Board were held throughout the year with the projected authorization to move forward with request for proposals approved in August 2016. Additionally, the utility was working with stakeholders at both the State and local level to obtain feedback on launching a Fiber to the Premise Project within Traverse City. A feasibility study is currently underway to provide information on whether this project is financially viable based on different model scenarios.

Employees TCL&P employs thirty-eight full-time employees. In fiscal year 2015-16 the utility had four new hires and one retirement. Additionally we had six employees who were recognized for their years of service, whether it was 5, 10, 15, 20, 25 or 30 years.

Energy Optimization

Through our customers who engaged in energy optimization programs, TCL&P saved an additional 2.73 million in kWh's. This exceeded the state-mandated goal by 4.8% and saved enough electricity to power approximately 420 Traverse City area homes for an entire year! The savings were through discounted LED light bulbs and incentives for purchasing ENERGY STAR appliances, high efficiency HVAC systems, recycling old inefficient refrigerators, freezers, room air conditioners and dehumidifiers. In addition, business customers were offered incentives for upgrading equipment with greater energy efficiency including lighting, motors, air systems, refrigeration, HVAC units and building management systems. TCL&P also contributed to the installation of wind and solar streetlights near West End Beach as part of an energy efficiency pilot project, and provided an additional \$100,000 to VENTURE NORTH for awarding energy efficiency loans to area businesses.



Balance Sheet

Current assets

Cash and cash equivalents	\$ 8,730,597
Receivables	
Customer, less allowances of \$319,084	
for uncollectible accounts (Light and Power Fund)	3,174,733
Accrued interest	34,124
Taxes	14,272
Other	779,495
Inventories	1,582,616
Prepaid expenses	14,456

Total current assets

14,330,293

Non-current assets

Investments	10,849,656
Accounts receivables	1,431,091
Other postemployment benefit asset	1,382,770
Long-term advances - due from primary government	689
Land and land improvements	1,079,419
Construction in progress	1,384,254
Capital assets being depreciated, net	55,256,779

Total non-current assets

71,384,658

Total assets

85,714,951

Deferred outflows

Deferred outflows of resources - Pensions	3,200,929
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Current liabilities

Accounts payable	\$ 1,727,912
Accrued expenses and other liabilities	509,531
Customer deposits	107,932
Unearned revenue	14,270
Due to primary government	298,832

Total current liabilities

2,658,477

Long-term liabilities

Compensated absences	201,758
Net pension liability	14,114,875

Total liabilities

16,975,110

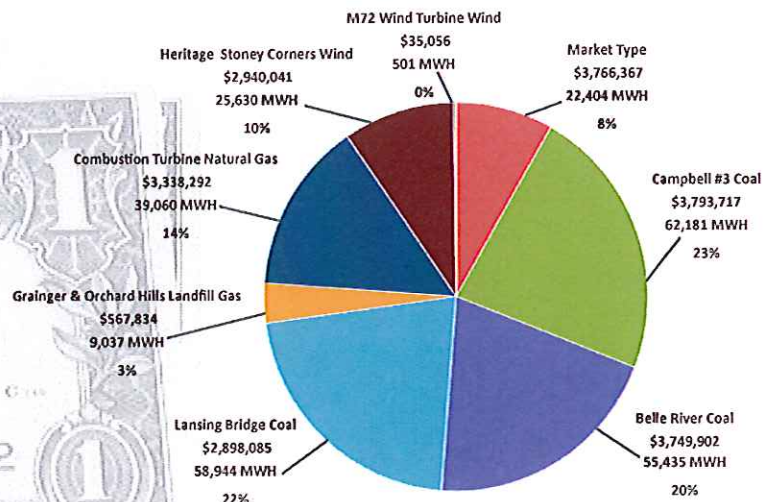
Net position

Invested in capital assets	57,720,452
Unrestricted	14,220,318

Total net position

\$ 71,940,770

2015-16 Fiscal year Energy Consumption



Revenue and Expenses

Where Does it Go?

For every dollar paid to the utility, **64¢** is spent on purchased power and related transmission costs.

13¢	Distribution & Transmission
11¢	Depreciation/Capital Investment
5¢	City Fee
3¢	General Administration
2¢	Public Service
1.6¢	Customer Accounting
.4¢	Fiber/WIFI

Commercial
48%

Industrial
31%

Where Does it Come From?

Residential
19%

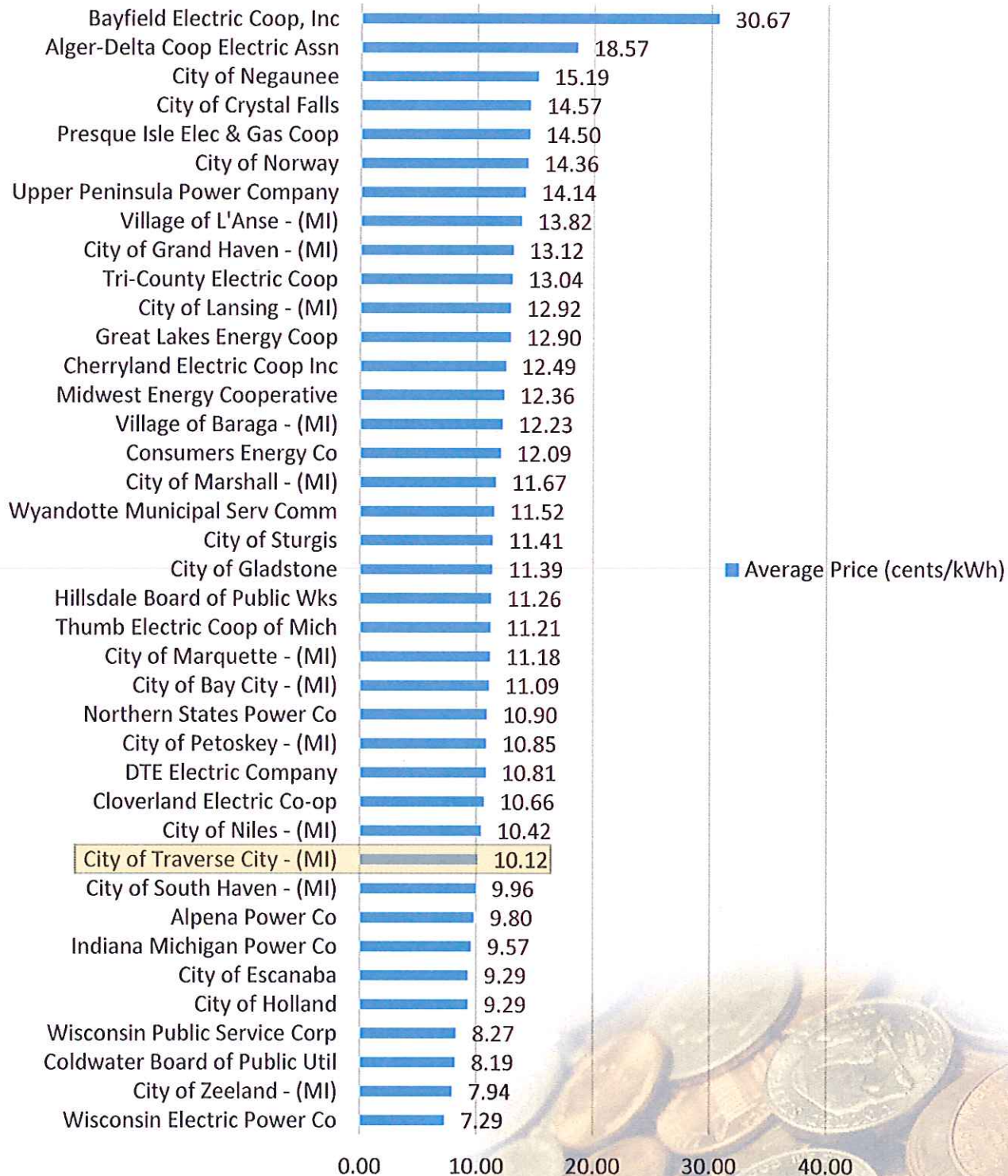
Public
Authority
1%

Street Lights
& other
1%

	FYE 2016	FYE 2015
Operating revenues		
Charges for services	\$ 31,944,489	\$ 34,652,551
MISO income	3,483,052	2,481,500
Other	381,008	265,290
Total operating revenues	35,808,549	37,399,341
Operating expenses		
Generation	23,070,005	22,855,173
Distribution	4,424,951	3,530,929
Transmission	421,135	406,584
Customer accounting	577,278	568,692
Public service	671,545	513,302
General administration	986,037	834,938
Fiber	105,858	101,209
WIFI	28,678	23,225
Other	62,001	59,036
City fee	1,798,832	1,876,047
Depreciation	2,397,571	2,274,546
Total operating expenses	34,543,891	33,043,681
Operating income (loss)	1,264,658	4,355,660
Nonoperating revenues (expenses)		
Rental income	93,247	91,226
Reimbursements	350,371	439,170
Interest income	289,116	251,071
Change in fair value of investments	59,202	59,202
Loss on sale of assets	(355,965)	(428,620)
Total nonoperating revenue	435,971	412,049
Income before transfers	1,700,629	4,767,709
Transfers		
Transfers in	175,000	-
Transfers out	(175,000)	-
Total transfers	-	-
Change in net position	1,700,629	4,767,709
Net position, beginning of year	70,240,141	65,472,432
Net position, end of year	\$ 71,940,770	\$ 70,240,141

Rate Comparison

Average Price (cents/kWh)
(Information obtained from EIA - 2015 data)



Financial, Operating & Other Ratios

(Fiscal Years Ending June 30, 2016, 2015, 2014 and 2013)

Ratio Description	2016	2015	2014	2013	2013 APPA 10,000-20,000 Customers
FINANCIAL RATIOS					
Revenue per KWH*					
* All Retail Customers	\$ 0.098	\$ 0.109	\$ 0.101	\$ 0.090	\$ 0.092
* Residential Customers	\$ 0.109	\$ 0.118	\$ 0.109	\$ 0.096	\$ 0.104
* Commercial Customers	\$ 0.108	\$ 0.118	\$ 0.108	\$ 0.099	\$ 0.095
* Industrial Customers	\$ 0.080	\$ 0.092	\$ 0.087	\$ 0.076	\$ 0.071
Debt to Total Assets	N/A	N/A	N/A	N/A	0.234
Operating Ratio	1.082	0.953	0.997	1.140	0.863
Current Ratio	5.37	10.64	8.96	9.58	2.65
Net income per revenue dollar	\$ 0.052	\$ 0.120	\$ 0.114	N/A	\$ 0.073
Uncollectible accounts per revenue dollar	\$ 0.0001	\$ 0.0011	\$ 0.0009	\$ 0.0010	\$ 0.0017
OPERATING RATIOS					
Retail customers per employee	341	330	331	305	399
Total OM expense per KWH sold	\$ 0.099	\$ 0.096	\$ 0.093	\$ 0.097	\$ 0.079
Total OM expense per retail customer	\$ 731	\$ 652	\$ 593	\$ 664	\$ 400
Total power supply expense per KWH sold	\$ 0.070	\$ 0.070	\$ 0.070	\$ 0.073	\$ 0.065
Purchased power cost per KWH	\$ 0.065	\$ 0.070	\$ 0.075	\$ 0.074	\$ 0.061
Retail customers per meter reader	5,113	4,986	4,967	4,740	5,769
Distribution OM expense per retail customer	\$ 346	\$ 283	\$ 270	\$ 295	\$ 155
Distribution expense per circuit mile	\$ 12,643	\$ 10,088	\$ 9,588	\$ 9,980	\$ 4,840
Customer accounting, service and sales expense per retail customer	\$ 45	\$ 46	\$ 39	\$ 44	\$ 48
Administrative and general expense per retail customer	\$ 77	\$ 67	\$ 61	\$ 81	\$ 143
OTHER RATIOS					
OSHA Incidence Rate	0%	0%	0%	N/A	2
Energy loss percentage	6.93%	0.88%	-7.12%	-1.17%	3.66%
System Load Factor	53.84%	49.75%	47.13%	49.07%	56.10%

Our Board

About Us

Total Customers	12,700
Miles of OH/UG Line	439.5
Total Employees	38
Years in operation.....	103

TCL&P proudly serves Traverse City and parts of Blair, East Bay, Elmwood, Garfield, Paradise and Peninsula Townships.

Jan Geht, Board Chairman

Jeff Palisin, Board Vice-Chairman

Robert Spence III, Board Member

Patrick McGuire, Board Member

John Taylor, Board Member

Amy Shamroe, City Commissioner

Tim Werner, City Commissioner

Marty Colburn, City Manager

Our Administrative Team

Timothy Arends, Executive Director

Jennifer St. Amour, Administrative Assistant

Karla Myers-Beman, Controller

Peter Schimpke, Manager of Operations & Engineering

Scott Menhart, Manager of Technology & Telecommunications

Rodney Solak, Line Superintendent

Blake Wilson, System Engineer

Mark Watson, Field Engineering Supervisor

Kelli Schroeder, Manager of HR & Communications

