A REGULAR MEETING

Of The

TRAVERSE CITY LIGHT AND POWER BOARD

Will Be Held On

TUESDAY, March 27, 2012

At

5:15 p.m.

In The

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

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

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

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

Posting Date: 3-23-12
4:00 p.m.

AGENDA

Pledge of Allegiance

1. Roll Call

2. Consent Calendar

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

a. Consideration of approving minutes of the Regular Meeting of March 13, 2012.

b. Consideration of authorizing a purchase order for two 69kV circuit breakers for the East Side Transmission Substation Project. (Dine)

c. Consideration of authorizing a purchase order for one 138kV circuit switcher for the East Side Transmission Substation Project. (Dine)

d. Consideration of authorizing a purchase order for control panels for the East Side Transmission Substation Project. (Dine)

Items removed from the Consent Calendar

a.

b.

c.

3. Old Business

a. None.

4. New Business

a. Consideration of approving the Six Year Capital Improvements Plan - 2012 and 2012- 2013 Operating Budgets. (Rice/Arends)

b. Consideration of authorizing a Tree Trimming Services Agreement with Penn Line Services, Inc. (Wilson)

5. Appointments

None.

6. Reports and Communications

a. From Legal Counsel.

b. From Staff.

c. From Board.

7. Public Comment

/st

TRAVERSE CITY
LIGHT AND POWER BOARD

Minutes of Regular Meeting
Held at 5:15 p.m., Commission Chambers, Governmental Center
Tuesday, March 13, 2012

Board Members -

Present: Barbara Budros, Patrick McGuire, John Snodgrass, Linda Johnson, Mike Coco

Absent: Jim Carruthers, John Taylor

Ex Officio Member -

Present: R. Ben Bifoss

Others: Ed Rice, W. Peter Doren, Stephanie Tvardek, Glen Dine, Tom Olney

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

With no objection from the Board, Chairman Coco amended the agenda to consider item 6(b)(1) before New Business.

Item 2 on the Agenda being Consent Calendar

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

a. Minutes of the Regular Meeting of February 28, 2012.

CARRIED unanimously. (Carruthers, Taylor absent)

Item 3 on the Agenda being Old Business

None.

Item 6 on the Agenda being Reports and Communications

B. From Staff.

1. Ed Rice spoke regarding the recent storm outage.

Item 4 on the Agenda being New Business

4(a). Consideration of entering into closed session to discuss records and information concerning the security and safety connected with the municipal electric system.

Moved by McGuire, seconded by Johnson, to go into closed session to discuss records and information concerning the security and safety connected with a municipal electric system.

Roll Call:

Yes – Budros, McGuire, Snodgrass, Johnson, Coco

No – None

CARRIED unanimously. (Carruthers, Taylor absent)

The Board entered into Closed Session at 5:38 p.m.
The Board returned to Open Session at 5:59 p.m.

4(b). East Side Transmission Substation project authorization.

The following individuals addressed the Board:

Ed Rice, Executive Director
Glen Dine, Chief Engineer
W. Peter Doren, General Counsel

Moved by Johnson, seconded by Budros, that the Light and Power Board authorize staff to proceed with the 138/69kV East Side Transmission Substation Project and 69kV Transmission Line Project and seek the necessary board approvals for expenditures and agreements.

Moved by Snodgrass that the vote be tabled until agreements with Consumers Energy and ITC are in place.

Motion failed due to lack of support.

The following individuals addressed the Board:

Chris Bzdok, 616 W. 7th Street

Motion before the Board is as follows: "That the Light and Power Board authorize staff to proceed with the 138/69kV East Side Transmission Substation Project and 69kV Transmission Line Project and seek the necessary board approvals for expenditures and agreements."

Roll Call:

Yes – Budros, McGuire, Johnson, Coco
No – Snodgrass

CARRIED. (Carruthers, Taylor absent)

4(c). Consideration of exercising an Option to Purchase Groleau Property.

The following individuals addressed the Board:

Ed Rice, Executive Director
Glen Dine, Chief Engineer
W. Peter Doren, General Counsel

Moved by Johnson, seconded by Budros, that the Light and Power Board authorize the Department to exercise the Option to Purchase given September 27, 2010 by Patricia C. Groleau to the Traverse City Light and Power Department, and to direct the Executive Director to give notice of the exercise to Patricia C. Groleau and proceed with the purchase of the property according to the terms of the Option Agreement between the parties dated September 27, 2010.

Roll Call:

Yes – Budros, McGuire, Johnson, Coco
No – Snodgrass

CARRIED. (Carruthers, Taylor absent)

4(d). Consideration of authorizing an Engineering Services Contract with GRP Engineering, Inc. for the East Side Transmission Substation.

The following individuals addressed the Board:

Glen Dine, Chief Engineer

Moved by McGuire, seconded by Budros, that the Light and Power Board authorize the Executive Director to add additional construction management services to the November 23, 2010 Agreement with GRP Engineering, Inc., for a fee not to exceed $69,500 including expenses for construction management services for the East Side Substation Project; subject to approval as to substance by the Executive Director and approval as to form by Counsel;

Further, authorizing the Executive Director to execute work orders for professional services and administer amendments and change orders that are in the best interests of the Light and Power Department.

Roll Call:

Yes – Budros, McGuire, Johnson, Coco
No – Snodgrass

CARRIED. (Carruthers, Taylor absent)

4(e). Consideration of authorizing an Engineering Services Contract with GRP Engineering, Inc. for the East Side Transmission Line.

The following individuals addressed the Board:

Ed Rice, Executive Director
Glen Dine, Chief Engineer

Moved by Johnson, seconded by McGuire, that the Light and Power Board authorize the Chairman and Secretary to execute an Agreement for Professional Services with GRP Engineering, Inc., for a total fee not to exceed $145,000 including expenses for design and construction management services for the East Side 69kV Transmission Line Project; subject to approval as to substance by the Executive Director and approval as to form by Counsel;

Further, authorizing the Executive Director to execute work orders for professional services and administer amendments and change orders that are in the best interests of the Light and Power Department.

Roll Call:

Yes – Budros, McGuire, Johnson, Coco

No – Snodgrass
CARRIED. (Carruthers, Taylor absent)

4(f). Consideration of authorizing a Procurement Agreement with Delta Star, Inc. for the purchase of one 138/69kV 90/120/150 MVA transformer for the East Side Transmission Substation Project.

The following individuals addressed the Board:

Ed Rice, Executive Director
Glen Dine, Chief Engineer

Moved by Johnson, seconded by McGuire, that the Board authorize the Chairman and Secretary to execute a Procurement Agreement with Delta Star, Inc. in the amount of $1,524,566; subject to approval as to substance by the Executive Director and approval as to form by Counsel; and further authorize the Executive Director to administer amendments and change orders that are in the best interests of the Light and Power Department.

Roll Call:

Yes – Budros, McGuire, Johnson, Coco
No – Snodgrass

CARRIED. (Carruthers, Taylor absent)

4(g). Consideration of authorizing a purchase order for three 138kV CT/PT metering units for the East Side Transmission Substation Project.

The following individuals addressed the Board:

Ed Rice, Executive Director

Moved by Johnson, seconded by Budros, that the Board authorize the Executive Director to issue a purchase order in the amount of $55,365 to Alstom Grid, Inc. for three 138kV Current/Voltage Transformers for the East Side Substation.

Roll Call:

Yes – Budros, McGuire, Johnson, Coco
No – Snodgrass

CARRIED. (Carruthers, Taylor absent)

4(h). Consideration of authorizing a purchase order for two 69kV 50KVA transformers for the East Side Transmission Substation Project.

The following individuals addressed the Board:

Ed Rice, Executive Director
Glen Dine, Chief Engineer

Moved by Johnson, seconded by McGuire, that the Board authorize the Executive Director to issue a purchase order in the amount of $71,600 to ABB Kuhlman for two 69kV 50KVA transformers for the East Side Substation.
Roll Call:

Yes – Budros, McGuire, Johnson, Coco
No – Snodgrass

CARRIED. (Carruthers, Taylor absent)

Item 5 on the Agenda being Appointments

None.

Item 6 on the Agenda being Reports and Communications

A. From Legal Counsel.

1. W. Peter Doren gave an update on Brown Bark I v. TCLP.

B. From Staff.

1. *Considered prior to New Business.*

C. From Board.

1. Chairman Coco thanked Vice Chair Linda Johnson for her service on the TCL&P Board.

Item 7 on the Agenda being Public Comment

No one from the public commented.

There being no objection, Chairman Coco declared the meeting adjourned at 6:54 p.m.

Edward E. Rice, Secretary
LIGHT AND POWER BOARD

/st

TRAVERSE CITY
LIGHT & POWER

To: **Light & Power Board**
From: Edward E. Rice, Executive Director
Date: March 20, 2012
Subject: Purchase of Two 69kV Circuit Breakers – East Side Substation

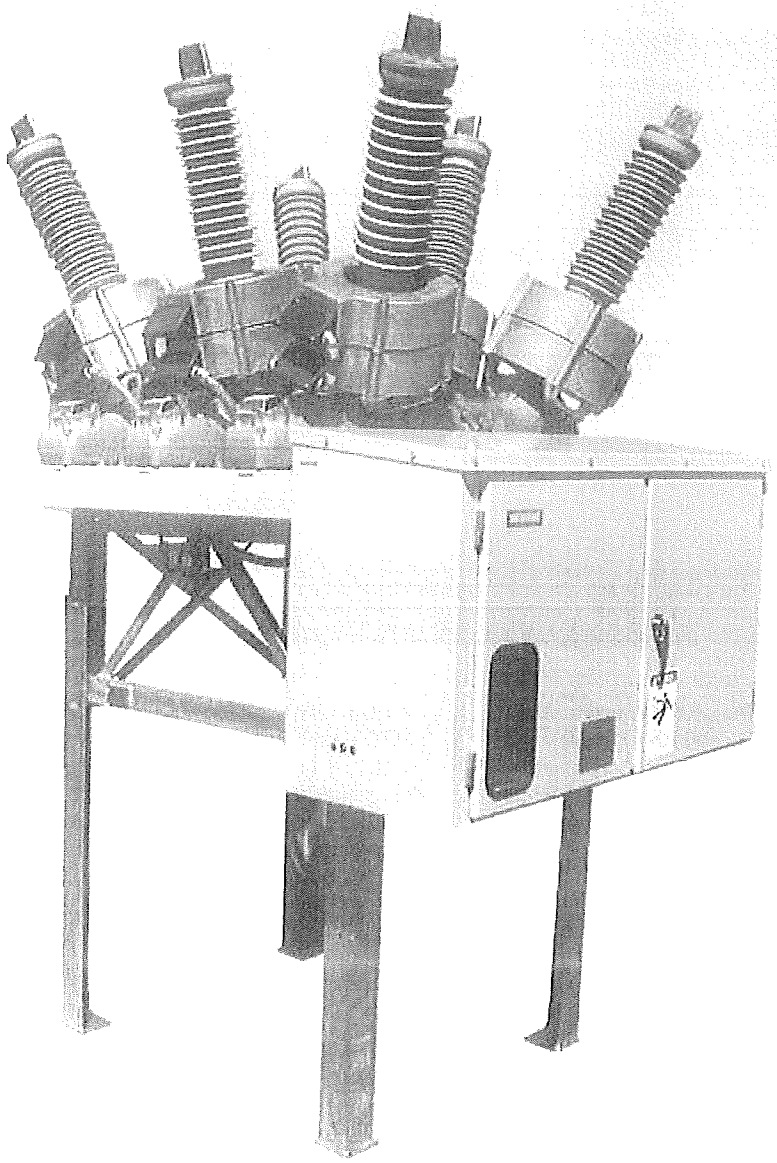
Bids have been obtained for the purchase of two 69kV circuit breakers for the East Side Substation Project. Bids were as follows:

Manufacturer	Total Price
Siemens	$ 69,700
ABB Power T&D	$ 76,914
Mitsubishi Elec	$ 100,754

Staff recommends accepting the low bid from Siemens Power Transmission and Distribution in the amount of $69,700.

If the Board concurs, the following motion is recommended:

MOVED BY _____, SECONDED BY _____, THAT THE BOARD AUTHORIZE THE EXECUTIVE DIRECTOR TO ISSUE A PURCHASE ORDER IN THE AMOUNT OF $69,700 TO SIEMENS POWER TRANSMISSION AND DISTRIBUTION FOR TWO 69KV CIRCUIT BREAKERS FOR THE EAST SIDE SUBSTATION.



SPS2 circuit breaker (15 kV–245 kV)

Longer operating life - lower maintenance costs

Answers for energy.

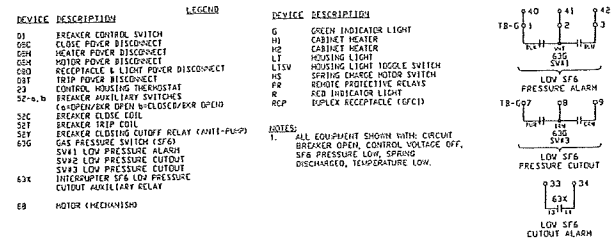
SIEMENS

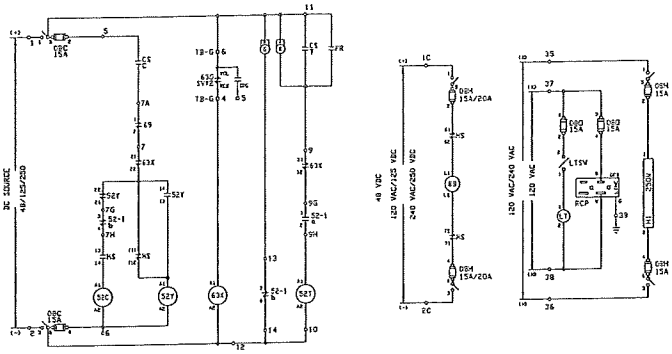
Spring-charged operating mechanism

The SPS2 is the product of tried and proven performance in the field. Our reputation for quality and extensive global experience are captured in the design principles of this circuit breaker.

More than 50,000 worldwide installations are up and running testimonies to the reliability of the spring-stored energy FA2/4 mechanism. This mechanism is fully equipped with a closing and opening spring fitted inside a common housing.

The operating mechanism incorporates roller bearings that allow wear-free transmission of forces and thus ensures a long service life. The charging gear, with its long-wearing spur wheels and its principle of no-load decoupling, is another component that ensures maintenance-free operation. Low operating mechanism force assures that the transmission elements are subjected to less stress resulting in optimal operating reliability.



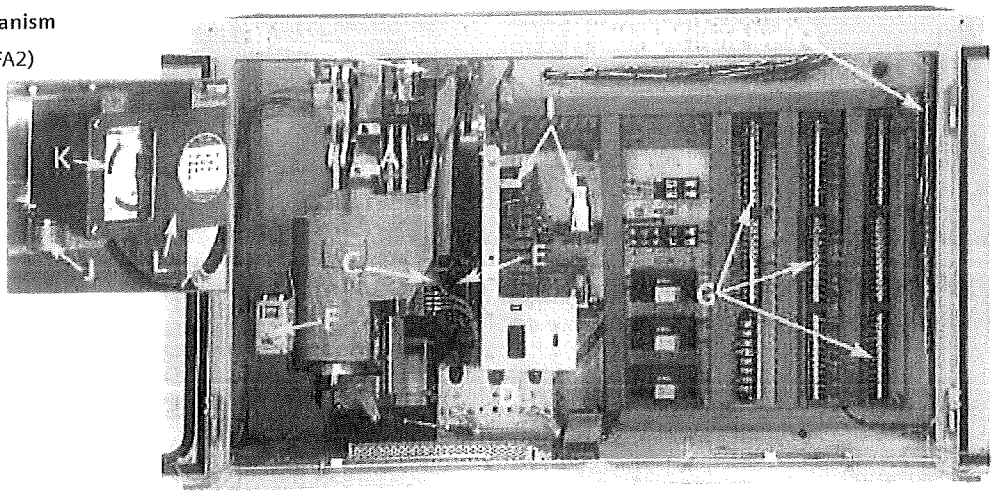


Control power requirements

Rated voltage	48 VDC	125 VDC	250 VDC	115 VAC	230 VAC
Trip coil current (amps)	16.0	12.0	6.7	12.0	6.7
Close coil current (amps)	4.6	1.9	1.7	2.5	6.7
Motor run current (amps)					
FA2	17.4	9.8	4.6	12.3	6.3
FA4	29.0	16.0	8.0	23.0	11.0

Spring-charged operating mechanism

A. Spring operating mechanism (FA2)
B. Close coil
C. Trip coil
D. Auxiliary switches
E. Motor (125 VDC/120 VAC)
F. Open/close indicator
G. Control terminal blocks
H. Bushing current transformer terminal blocks (on right-hand wall)
I. Control relay (on back panel)
J. SF6 fill connection (outside left side)
K. SF6 pressure gauge (outside left side)
L. SF6 density switch (outside left side)



11


A
B

TRAVERSE CITY
LIGHT & POWER

To: **Light & Power Board**
From: Edward E. Rice, Executive Director
Date: March 20, 2012
Subject: Purchase of One 138kV Circuit Switcher – East Side Substation

Bids have been obtained for the purchase of one 138kV circuit switcher for the East Side Substation Project. Bids were as follows:

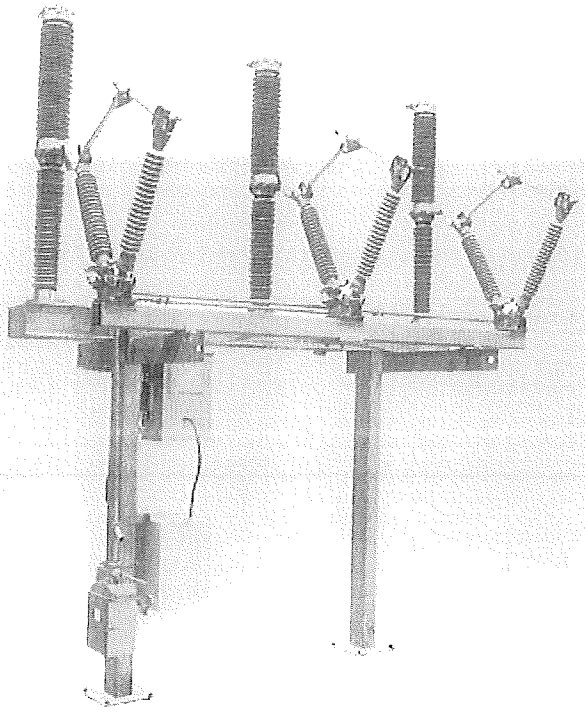
Manufacturer	Total Price
Siemens	$ 36,958
S&C Electric	$ 41,225
Southern States	$ 41,915

Staff recommends accepting the low bid from Siemens Power Transmission and Distribution in the amount of $36,958.

If the Board concurs, the following motion is recommended:

MOVED BY _____, SECONDED BY _____, THAT THE BOARD AUTHORIZE THE EXECUTIVE DIRECTOR TO ISSUE A PURCHASE ORDER IN THE AMOUNT OF $36,958 TO SIEMENS POWER TRANSMISSION AND DISTRIBUTION FOR ONE 138KV CIRCUIT SWITCHER FOR THE EAST SIDE SUBSTATION.

Type CPV2 Circuit Switchers



Siemens CPV2 Circuit Switchers
Siemens Type CPV2 (Circuit Protector Vertical) circuit switchers are ideal for applications that require 3 cycle circuit interruption and requires limited space . The CPV2 model provides space-saving, fast protection at an economical cost.

Operation of the CPV2 is controlled by a FA2 spring operator which is same as the operating mechanism used in the SPS2 SF6 Circuit Breakers worldwide. There are several reasons to specify and install the CPV2 Circuit Switcher: field proven design, robust construction, simple installation, minimal maintenance and low installed cost. The Siemens CPV2 can switch and protect transformers, cables, shunt capacitor banks and shunt reactors. It also provides a low cost, low temperature, high fault interrupting device. It has a consistent and fast operating time of 3 cycles with a high interrupting capability of up to 40kA.

The Siemens type CPV2 Circuit Switcher is ideal for space limited applications. In new or existing substations where sufficient room is not available to install a horizontal circuit switcher or a conventional SF6 dead tank circuit breaker. The vertical type CPV2 is also the preferred model for retrofit installations where a circuit switcher is recommended to replace an existing fault interrupting device.

Gas Monitoring
Each pole unit is equipped with a manifold which incorporates a fill valve, a pressure gauge and rupture disc. This manifold is located at the lower end of the pole unit, connected to the cover assembly by a union coupling. The coupling allows the pressure gauge to be rotated by the user to provide the most satisfactory view from the ground.

The pressure gauge has a color coded face for ease of reading from a distance. A label showing a picture of the gauge and an operating pressure range versus ambient temperature is located on the door of the control cabinet.

For specific applications of the Siemens Type CPV2 Circuit Switcher, contact the nearest Siemens sales office.

Siemens exclusive!
As an option, the Siemens CPV2 Circuit Switcher can be equipped with a temperature compensated pressure switch to automatically monitor the SF6 gas status in the pole units. This switch with gauge is located inside the control cabinet and is connected to the pole units by stainless steel tubing. It has two sets of contacts. One set of contacts provides an alarm indication when the gas pressure approaches within 5 psi of the lockout value. The other set prevents operation if gas pressure falls to a level at which current interruption is not assured. The temperature compensating feature of the switch avoids alarms and lockouts due to normal pressure variations associated with local temperature changes.

Type FA2 Operating Mechanism

The type FA2 operator and necessary control and monitoring equipment are housed in a common cabinet. Large doors located on either side of cabinet are easily lifted from their hinges for unobstructed access to the cabinet interior.

The FA2 operating mechanism stores energy for use in closing the circuit switcher. This energy is stored by compressing a powerful spring. An electrical motor with an integral gear reduction set (called a gearmotor) is used to compress the operator spring. The purpose of storing the motor-supplied energy in the spring is to allow a rapid closing operation of the circuit switcher. It takes about ten seconds for the gearmotor to compress the spring, but the spring can discharge and close the switcher in less than 0.1 seconds.

With the circuit switcher open, a close operation is initiated by energizing the gearmotor. The closing spring becomes fully compressed, and then discharges, closing the switcher and charging the opening spring. The gearmotor is automatically de-energized.

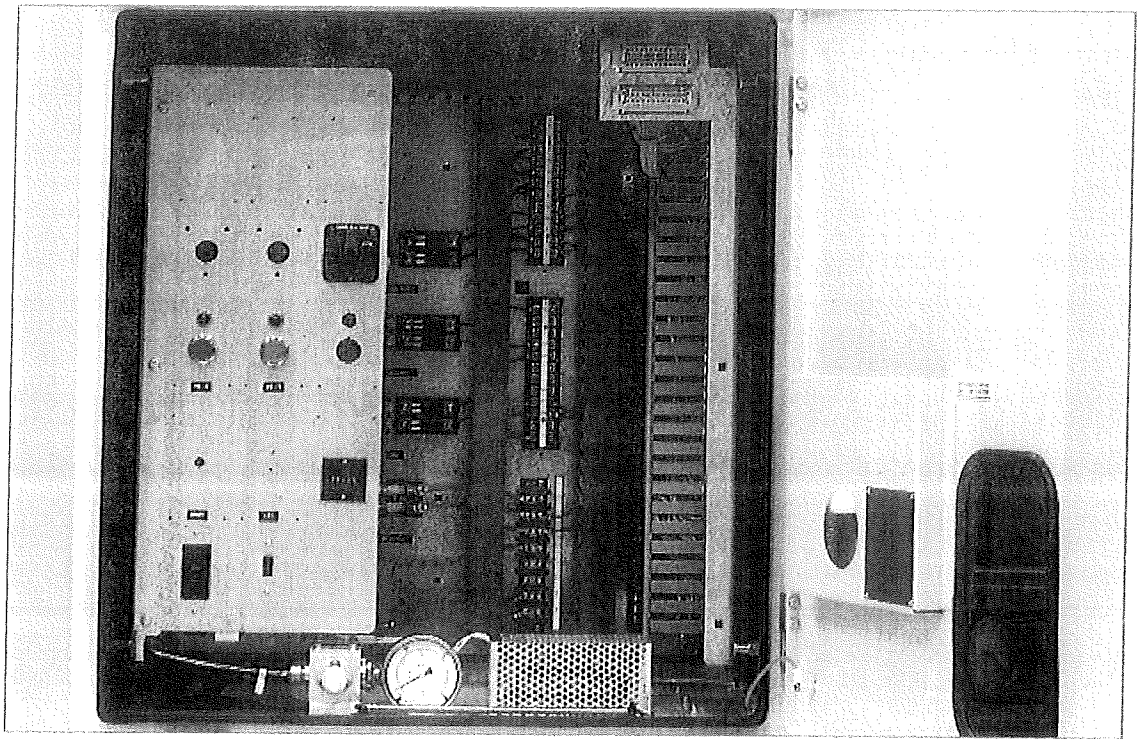
The switcher is maintained in the closed position by a latch system in the operator. A trip operation is initiated by energizing a solenoid which releases the trip latch and allows the switcher to open.

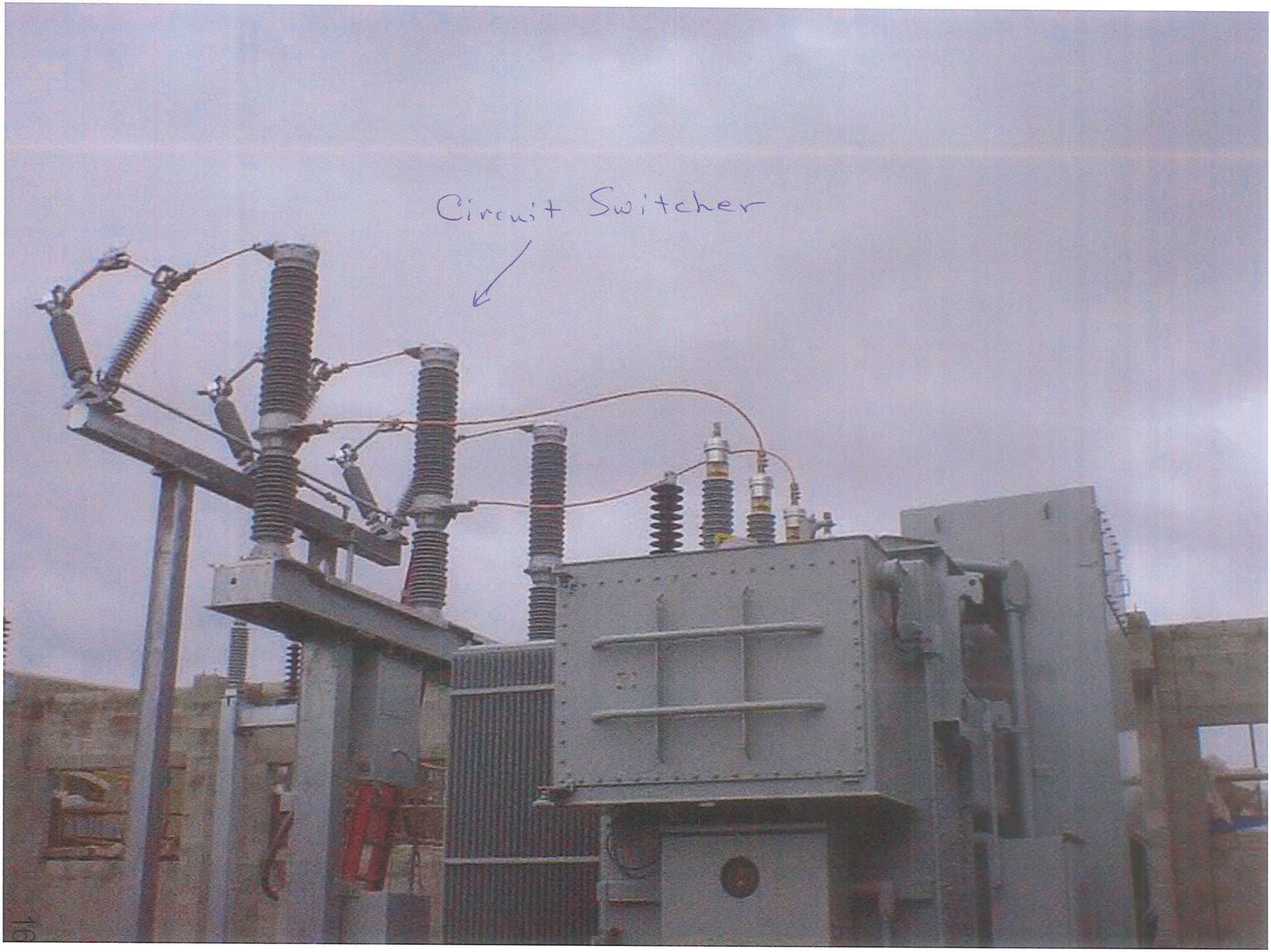
Standard and Optional Features (Shown)

A FA-4 Spring Operator Mechanism
B Two Cabinets, Painted ANSI Gray #70
C Close Coil/ Dual Trip Coils
D Control Terminal Blocks
E Red/Green Indicating Lights
F Trip/Close Pushbuttons
G Non-Reset Operations Counter
H 14-Stage Adjustable Auxiliary Switch (8 Stages for Customer)
I 120 or 240 VAC Heater
J Fused Pull-Outs for DC Control and Heater Circuits
K Open/Close Position Indicator (Interrupter)
L Internal Cabinet Lights (2) with Toggle Switch (1)
M Duplex Receptacle (GFI)
N 125 VDC Motor
O View Window in Front Door
P Local/Remote Selector Switch (Optional)
Q Gas Monitor with Lock-Out (Optional)
R Control Relay(s) (Optional)
S Auxiliary Switch Stages to 28 Max. – 24 Stages for Customer (Optional)
T Pressure Gauge (Optional with Gas Monitor System)
U Gas Fill Port (Optional with Gas Monitor System)

Other Optional Features (Not Shown)

Internal Cabinet Light with Door Actuated Switch
Fused Knife Switches
Molded Case Circuit Breakers
120/240 VAC Cabinet Heater with Thermostat Control
48 VDC Motor




Circuit Switcher

TRAVERSE CITY
LIGHT & POWER

To: **Light & Power Board**
From: Edward E. Rice, Executive Director
Date: March 20, 2012
Subject: Purchase of Control Panels – East Side Substation

Bids have been obtained for the purchase of control panels for the East Side Substation Project. Bids were as follows:

Manufacturer	**Total Price**
Harlo Corporation	$ 66,933.00
Electrical Power Products	$ 72,402.00
Systems Control	No Bid (busy with other work)

Staff recommends accepting the low bid from Harlo Corporation in the amount of $66,933.00.

If the Board concurs, the following motion is recommended:

MOVED BY _____, SECONDED BY _____,

THAT THE BOARD AUTHORIZE THE EXECUTIVE DIRECTOR TO ISSUE A PURCHASE ORDER IN THE AMOUNT OF $66,933 TO HARLO CORPORATION FOR THREE CONTROL PANELS FOR THE EAST SIDE SUBSTATION.

Harlo Proposal No.: 15411
Customer: Traverse City Light & Power
Date: 3/14/2012
Bill of Material For: East Hammond Substation
Panel No.: Panel No. 1

Item	Manufacturer	Description	Qty
1	Schweitzer	0387503X53XX4XX (2RU)	2
2	Bitronics	VTAIE120000300 Voltmeter	1
3	Electroswitch	2457D with engraving	1
4	GE	116B6708G43R73R4 ET-16 Red LED 125V	1
5	GE	116B6708G43G73G4 ET-16 Green LED 125V	1
6	Schweitzer	0735VX10944CFXXXXX16101XX	1
7	Electroswitch	9303DD Type LSR w/Engraving	1
8	Electroswitch	2457D with engraving	1
9	INCON	1250-LTC-0-I-S-120 Tap Position Indicator	1
10	Schweitzer	0351S6X363A5421	1
11	Electroswitch	7808D Lockout Relay	2
12	GE	116B6708G43A73A4 ET-16 Amber LED 125V	2
13	GE	116B6708G43A73W5 ET-16 White LED 125V	1
14	ABB	FT-19R FR2G-137-036-084	2
15	ABB	FT-19R FR2G-056-036-056	1
16	Schweitzer	C273A cable 14 ft	4
17	States	M-25012 Type NT, Slide Link, 12 pole terminal block	13
18	States	M-25104G Type NT 4 pole slide link Shorting T.B.	7
19	Bussmann	R25030-1SR 1 Pole, 250V Fuse Block	1
20	Bussmann	FRN-R6 6A 250V RK5 TD Fuse	1
21	Harlo	9 RU x 28"W formed rack plate with cutouts	1
22	Harlo	11 RU x 28"W formed rack plate with cutouts	1
23	Harlo	14 RU x 28"W formed rack plate with cutouts	1
24	Harlo	15 RU x 28"W formed rack plate with cutouts	1
		Spare Equipment	
SP1	GE	286A5442PR73 ET-16 Red LED Lamp - 125vdc/120vac	1
SP2	GE	286A5442PG73 ET-16 Green LED Lamp - 125vdc/120vac	1
SP3	GE	286A5442PA73 ET-16 Amber LED Lamp - 125vdc/120vac	2
SP4	States	M-25104G Type NT 4 pole slide link Shorting T.B.	1
SP5	Bussmann	FRN-R6 6A 250V RK5 TD Fuse	1

Harlo Proposal No.: 15411
Customer: Traverse City Light & Power
Date: 3/14/2012
Bill of Material For: East Hammond Substation
Panel No.: Panel No. 2

Item	Manufacturer	Description	Qty
1	Schweitzer	0587Z0X325312XX (3RU)	1
2	GE	116B6708G43A73W5 ET-16 White LED 125V	6
3	Bitronics	VTAIE120000300 Voltmeter	1
4	Schweitzer	240700013 (1RU) Satellite Clock	1
5	Schweitzer	2523013100XAXXX Annunciator Panel	1
6	Schweitzer	35303B0DX211A0XXXXXX	1
7	Electroswitch	7808D Lockout Relay	1
8	GE	116B6708G43A73A4 ET-16 Amber LED 125V	1
9	ABB	FT-19R FR2G-056-036-036	1
10	Schweitzer	C273A cable 6 ft	3
11	States	M-25012 Type NT, Slide Link, 12 pole terminal block	12
12	States	M-25104G Type NT 4 pole slide link Shorting T.B.	3
13	Bussmann	R25030-3SR 3 Pole, 250V Fuse Block Class R for Type FRN-R fuse	3
14	Bussmann	FRN-R6 6A 250V RK5 TD Fuse	9
15	Harlo	9 RU x 28"W formed rack plate with cutouts	1
16	Harlo	11 RU x 28"W formed rack plate with cutouts	1
17	Harlo	14 RU x 28"W formed rack plate with cutouts	1
18	Harlo	15 RU x 28"W formed rack plate with cutouts	1
		Spare Equipment	
SP1	GE	286A5442PA73 ET-16 Amber LED Lamp - 125vdc/120vac	4
SP2	States	M-25012 Type NT, Slide Link, 12 pole terminal block	1
SP3	States	M-25104G Type NT 4 pole slide link Shorting T.B.	1
SP4	Bussmann	R25030-3SR 3 Pole, 250V Fuse Block Class R for Type FRN-R fuse	1
SP5	Bussmann	FRN-R6 6A 250V RK5 TD Fuse	9

Harlo Proposal No.: 15411
Customer: Traverse City Light & Power
Date: 3/14/2012
Bill of Material For: East Hammond Substation
Panel No.: Panel No. 3

Item	Manufacturer	Description	Qty
1	Yokogawa	106-452-DDAA Synchroscope Type AB 40	1
2	Bitronics	MTWIEC1B2BL01N0	1
3	GE	116B6708G43A73W5 ET-16 White LED 125V	1
4	Schweitzer	0311B01323254XX (3RU)	1
5	Schweitzer	0311C113N3A54X1	1
6	ABB	FT-19R FR2G-056-036-056	1
7	ABB	FT-19R FR2G-056-036-209	1
8	States	M-25012 Type NT, Slide Link, 12 pole terminal block	12
9	States	M-25104G Type NT 4 pole slide link Shorting T.B.	4
10	Schweitzer	C273A cable 15 ft	2
11	Bussmann	R25030-1SR 1 Pole, 250V Fuse Block	1
12	Bussmann	FRN-R6 6A 250V RK5 TD Fuse	1
13	Harlo	9 RU x 28"W formed rack plate with cutouts	1
14	Harlo	11 RU x 28"W formed rack plate with cutouts	1
15	Harlo	14 RU x 28"W formed rack plate with cutouts	1
16	Harlo	15 RU x 28"W formed rack plate with cutouts	1
		Spare Equipment	
SP1	GE	116B6708G43A73W5 ET-16 White LED 125V	1
SP2	States	M-25012 Type NT, Slide Link, 12 pole terminal block	1
SP3	States	M-25104G Type NT 4 pole slide link Shorting T.B.	1
SP4	Bussmann	FRN-R6 6A 250V RK5 TD Fuse	1

CONTROL PANELS
HALL ST. SUBSTATION

21

PROJECT AUTHORIZATION REQUEST FORM

TRAVERSE CITY LIGHT & POWER

Project Name: 138/69kv East Side Transmission Substation and 69kv Transmission Line

CIP: $5,200,000

Date of Board Presentation/Consideration: March 13, 2012

Board Action: (Approved) Not Approved No Action

Budgeted in Capital Plan: Yes

Goals and Objectives: Target Completion date of December 31, 2012

Project Description:

Construct a new 90/120/150 MVA 138/69kv transmission substation and connect to ITC's 138kV transmission system. Also jointly construct with Consumers Energy 4.1 miles of 69kv transmission line to connect the new transmission substation to TCL&P's existing 69kv transmission system located on Parsons Road.

The major TCL&P substation equipment will include: (1) 138kV circuit switcher, (1) power transformer, (2) 69kV breakers, 69kV switches, control house with equipment, and aluminum bus with supporting structures.

The major 69kv transmission line facilities will include poles, conductor, and line post insulators.

Reference: Exhibit A, Exhibit B, Exhibit C, Exhibit D, Exhibit E and Exhibit F

Project Purpose and Necessity (Problem We Are Solving):

The TCL&P transmission system is a dedicated MISO transmission asset that, therefore, is required to meet specific FERC reliability standards. TCL&P currently receives approximately $2.0 M / year in revenue as a result of joining MISO and for complying with the reliability standards.

MISO in conjunction with TCL&P performed an analysis of the TCL&P electric system and determined that there are certain conditions under which the TCL&P electric system does not meet the reliability standards. TCL&P has submitted in conjunction with ITC (the regional RTO), the East Side Substation and Transmission Projects to MISO to remedy the reliability standard issues. This submission was analyzed by MISO through their MISO Transmission Expansion Planning (MTEP) process.

The purpose of this process is to ensure that MISO transmission projects meet the FERC reliability standards, are financially sound and meet prudent utility planning criteria, thus resulting in a safe and reliable transmission system. In December 2010, the MISO Board of Commissioners, located in Indianapolis, Indiana, after significant review, APPROVED the TCL&P/ITC projects.

Of particular importance during the MISO system analysis review, their load studies conducted at MISO showed that under certain TCL&P single contingency conditions, segments of the TCL&P electric system would experience high loading conditions that would result in loss of load for an indefinite period of time. This violates MISO/FERC reliability standards. MISO concluded that the East Side Projects remedied the conditions and would bring TCL&P into compliance with the necessary reliability standards. MISO therefore approved the projects in December 2010.

Reference: Traverse City Light and Power Transmission Planning Criteria; Christopher M. Bzdok, Mayor, Letter of October 27, 2010; Peter Schimpke, MPPA Email of December 2, 2010 MTEP 2010 Approval of TCL&P Projects

Project Benefits:

The East Side Transmission Substation and Transmission Line Project Benefits:

- meet MISO/FERC reliability standards
- relieve overload conditions on the TCL&P transmission system
- costs are recovered through Attachment O filing with MISO
- provides increased reliability to TCL&P system and the area transmission network
- provides for the safety and well being of the public
- provides necessary transmission service for existing and future load growth

Other Alternatives:

Having received Board Approval of the 2009 Capital Plan which included the NEW East Side Substation and Transmission Projects, the planning criteria on the east side of the TCL&P system required a new 138kV connection to the existing ITC 138kv transmission line including property for the necessary facilities, and a transmission corridor for TCL&P to construct 4.1 miles of transmission line.

Alternative sites for substation facilities and the 138kv tap were analyzed and determined to: (a) require additional expenditures, (b) damaging to the view shed of East Grand Traverse Bay, (c) located near established residential areas, (d) difficult winter accessibility, (e) require significantly more site preparation due to the existing hilly terrain, (f) difficult to accommodate the needed 138kV tap.

The only reasonable transmission corridor available was to jointly use the existing 4-Mile Road and railroad corridor with Consumers Energy.

Timing of Project (Why Now):

In 2010 the MISO Board of Commissioners voted and approved the necessary TCL&P and ITC projects. In 2011 TCL&P completed survey work, environmental site assessment, land division, site plan development, and obtained approvals from East Bay Township. ITC and TCL&P are currently completing final design and beginning material procurement. TCL&P will be proceeding with closing on the purchase of property within the next couple weeks and is in the process of preparing for spring construction activities.

MISO/FERC requires TCL&P to meet reliability standards. Reliability issues have been identified as early as 2006 that have not been remedied. Continued non-compliance could result in fines or penalties imposed on TCL&P. Indications were given to MISO that remedies would be in place in 2009. TCL&P has extended this to December 31, 2012 with MISO. Further delays may be problematic, not to mention that TCL&P's transmission system remains at risk for substantial loss of load.

Reference: Exhibit D, and East Bay Township Planning Commission Findings of Fact

Project Timeline Gant Charts

SUBSTATION COSTS	Quantity	Cost	Expected Board Approval Date
• Property	-	500k	March 2012
• Site Work	-	250k	March 2012
• Transformer	1	1,525k	March 2012
• Circuit Switcher	1	37k	March 2012
• Circuit Breakers	2	70k	March 2012
• 138kv Metering CT/PT	3	56k	March 2012
• Relaying/control panels	1	66k	March 2012
• Control House	1	52k	Contractor to furnish
• Other Misc Equipment/work	-	66k	N/A
• Substation Const. Contract		200k	May 2012
• SS Transformer	2	72k	March 2012
• Survey, Environmtl, Borings		17k	Completed
		$2,911k	
• Engineering/Design/Const Mgmt		228k	SUBSTN Design Apprvd Nov 2010 - $158.5k
• Contingency		55k	
		$283k	
	SUBTOTAL	$3,194K	

TRANSMISSION COSTS	Quantity	Cost	Expected Board Approval Date
• Poles	-	595k	May 2012
• Conductor	-	158k	May 2012
• Insulators & Hardware	-	217k	May 2012
• Survey, Environmtl, Borings		22k	Completed
• Construction Contracts	-	843k	June 2012
• Railroad Monitoring	-	65k	September 2012
		$1,900k	
• Engineering/Design/Const Mgmt		145k	March 2012
• Contingency (10%)		188k	
		$333k	
	SUBTOTAL	$2,233k	
	PROJECT TOTAL	**$5.427M**	

Engineering Preliminary Project Cost Estimate: $5.43M

Financing Method:

Cash from TCL&P fund balance as planned for. Bonding will not be required.

Financial Benefits/Implications:

These projects have received approval from MISO and qualify as transmission assets that allow TCL&P to be reimbursed from revenues received by MISO for transmission service. Each year TCL&P is required to file financial statements known as an Attachment O filing with MISO. TCL&P currently receives approximately $2M/year from MISO. The new TCL&P investment in transmission facilities will increase annual revenue by approximately $650,000 per year subject to annual adjustments in Attachment O filings with MISO. The project will pay for itself in approximately ten years and bring in additional revenues beyond that on a depreciated value basis.

Impact on O&M Expenses:

Existing labor force will operate (TCL&P System Control Center) and perform normal monthly substation inspections (Line Department). Major Substation equipment can last as long as 50 years with proper maintenance and normal loading conditions. The major maintenance activities on this type of substation is for periodic preventive maintenance and testing of the power transformer, breakers, and circuit switcher, generally on a five year cycle at a cost of approximately $30,000 for outside services.

Staff Recommended Board Action:

Staff recommends L&P Board approval of the 138/69kv East Side Substation and 69kv Transmission Line Projects, necessary expenditures, and necessary agreements with Consumers Energy and ITC/METC in order to provide safe and reliable transmission service to all its customers.

Attachments:

Exhibit A Substation Site Rendering
Exhibit B Transmission Line Route Map
Exhibit C Transmission Line Rendering
Exhibit D Certificate of Survey
Exhibit E Support Letters
Exhibit F Site Plans
Project Gant Charts

East Bay Township Planning Commission Findings of Fact
Traverse City Light and Power Transmission Planning Criteria
Christopher M. Bzdok, Mayor, Letter of October 27, 2010
Peter Schimpke, MPPA – Email of December 2, 2010 – MTEP 2010 Approval of TCL&P Projects

TRAVERSE CITY
LIGHT & POWER

To: **Light and Power Board**
From: Ed Rice, Executive Director
Date: March 23, 2012
Subject: 2012-13 Budget and Six Year Capital Improvements Plan - 2012

In accordance with City Charter Chapter XVIII, section 179 (o), the 2012-13 Operating Budget and Six Year Capital Improvements Plan must be submitted to the City Commission by its last meeting in April.

The attached budget and capital plan have been revised to incorporate the changes made by the Board at its March 22, 2012 Study Session:

Staff recommends Board approval of the 2012-13 Budget and Six Year Capital Plan and that they be forwarded to the City Commission for their consideration. The following motion would be appropriate if you agree with staff's recommendation:

MOVED BY _____, SECONDED BY _____

THAT THE LIGHT & POWER BOARD APPROVES THE 2012-13 OPERATING BUDGET AND SIX YEAR CAPITAL IMPROVEMENTS PLAN AS PRESENTED AND DIRECTS STAFF TO SUBMIT THEM TO THE CITY COMMISSION FOR THEIR CONSIDERATION.

TRAVERSE CITY
LIGHT & POWER

SIX YEAR CAPITAL IMPROVEMENTS PLAN – 2012

INTERNAL FINANCING:

GENERATION:

Community Solar – 50 KW
Location: ***Local solar generation either inside or outside city limits***
Character: ***Solar panels either free standing or on buildings or rooftops***
Extent: ***Costs related to installation of solar panels to provide up to 50 Kilowatts of generation.***
Estimated Cost: ***$400,000***
Fiscal Year(s): ***2012-13***

DISTRIBUTION and SUBSTATION:

Line Improvements, Extensions, New Services
Location: ***Throughout the entire service area***
Character: ***Construction/replacement of overhead and underground distribution facilities involving the use of wire, poles, meters, cabinets, and transformers.***
Extent: ***This is an annual project in which wages, benefits, and equipment charges are capitalized for upgraded existing services or to provide for new customer services.***
Estimated Cost: ***$6.35 Million***
Fiscal Year(s): ***2012-13 through 2017-18 (Annual Program)***

Distribution Circuit Additions/Upgrades
Location: ***Throughout the entire service area***
Character: ***Construction of new overhead distribution circuits & replacement of existing deteriorated underground wire.***
Extent: ***New circuits and upgrade of existing circuits to improve reliability and serve anticipated growth and replacement of deteriorated underground wires.***
Estimated Cost: ***$5.4 Million***
Fiscal Year(s): ***2012-13 through 2017-18 (Annual Program)***

TRAVERSE CITY LIGHT & POWER

SIX YEAR CAPITAL IMPROVEMENTS PLAN – 2012

DISTRIBUTION and SUBSTATION (continued):

Distribution Circuit Rebuild (NEW)
Location: ***Throughout the entire service area. In 2012-13 the circuit BW-22 will be rebuilt which includes the area: South of 8th St. between Woodmere Ave & Garfield Ave (Traverse Heights Neighborhood) to Hammond and TraverseField.***
Character: ***Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc. Conversion of overhead facilities to underground as appropriate.***
Extent: ***New circuits and upgrade of existing circuits to improve reliability and serve anticipated growth to include undergrounding facilities as appropriate.***
Estimated Cost: ***$11.4 Million***
Fiscal Year(s): ***2012-13 through 2017-18 (Annual Program)***

69kV/13.8kV Distribution Substation-SOUTH
Location: ***Southern portion of service area – possibly outside city limits***
Character: ***Construction of new 69/13.8kV distribution substation.***
Extent: ***To include land purchase and facilities***
Estimated Cost: ***$3.8 Million***
Fiscal Year(s): ***2012-13***

Street Lighting System Additions
Location: ***New street lighting along Silver Drive in the Grand Traverse Commons area***
Character: ***LED street lighting.***
Extent: ***Removal of any old street lights and installation of new LED street lights.***
Estimated Cost: ***$100,000***
Fiscal Year(s): ***2012-13***

Street Lighting (LED) System Replacements (NEW)
Location: ***Throughout the entire utility service area***
Character: ***LED street lighting replacements.***
Extent: ***Removal of any old high pressure sodium street lights and replace with LED lights.***
Estimated Cost: ***$960,000***
Fiscal Year(s): ***2012-13 through 2017-18 (Annual Program)***

TRAVERSE CITY LIGHT & POWER

SIX YEAR CAPITAL IMPROVEMENTS PLAN – 2012

DISTRIBUTION and SUBSTATION (continued):

Pine Street Overhead to Underground Conversion
Location: ***Starting from behind Hall Street Substation South along Pine Street & crossing the Boardman River***
Character: ***Convert existing overhead distribution facilities to underground.***
Extent: ***In concert with TIF 97 Plan for Pine Street projects – this is a two phase project as directed by the DDA through the TIF 97 Plan.***
Estimated Cost: ***$1 Million***
Fiscal Year(s): ***2012-13 through 2013-14***

TRANSMISSION and SUBSTATION:

69kV Load Break Switches
Location: ***Three separate locations – South Airport Sub Junction on LaFranier Rd, Barlow Junction near Barlow Substation, & Cass Road Junction near Twelfth Street***
Character: ***New steel poles & transmission switches***
Extent: ***Replacing wood poles and switches with new steel poles & switches***
Estimated Cost: ***up to $600,000***
Fiscal Year(s): ***2014-15 through 2016-17***

69kV Transmission Line and Substation – EAST
Location: ***East Side of Service Area (substation and majority of the transmission line would be outside the city limits)***
Character: ***Overhead transmission facilities to include new poles and wire***
Extent: ***From a new transmission substation to an existing distribution substation***
Estimated Cost: ***$4.5 Million***
Fiscal Year(s): ***2012-13***

Transmission Line Reconductor
Location: ***Existing transmission corridor along Hammond, Barlow, LaFranier, Cass, Wadsworth, and north end of Boardman Lake***
Character: ***Overhead transmission facilities to include new poles and wire.***
Extent: ***Reconductor/rebuilding of existing 69kV transmission lines with new 69kV transmission lines.***
Estimated Cost: ***$3.675 Million***
Fiscal Year(s): ***2014-15 through 2017-18***

TRAVERSE CITY
LIGHT & POWER

SIX YEAR CAPITAL IMPROVEMENTS PLAN – 2012

FACILITIES:

M-72Wind Turbine Refurbishment
Location: ***Bugai Road @ M-72***
Character: ***Replace existing gear box with new gear box***
Extent: ***Repair or replacement due to normal wear.***
Estimated Cost: ***$150,000***
Fiscal Year(s): ***2015-16***

Hastings Service Center Facility Improvements
Location: ***1131 Hastings Street***
Character: ***Site improvements to existing facility***
Extent: ***Facility expansion/improvements***
Estimated Cost: ***$1.28 Million***
Fiscal Year(s): ***2012-13 through 2017-18 (Annual Program)***

SCADA, COMMUNICATIONS, and OTHER ITEMS:

Smart Metering Technologies (AMI)
Location: ***Entire Service Area***
Character: ***Electric meters and software to accommodate smart metering capabilities.***
Extent: ***An annual program to provide for the migration to electronic smart meters that will assist utility customers on energy use and reliability.***
Estimated Cost: ***$750,000***
Fiscal Year(s): ***2012-13 through 2017-18 (Annual Program)***

SCADA (Supervisory Control and Data Acquisition)/Dispatch Improvements
Location: ***1131 Hastings Street and Hall Street Substation***
Character: ***Expansion of capabilities in 24 hour control center***
Extent: ***Equipment upgrades and improvements/modifications to the current control room and to provide for a remote SCADA control center.***
Estimated Cost: ***$150,000***
Fiscal Year(s): ***2012-13***

TRAVERSE CITY
LIGHT & POWER

SIX YEAR CAPITAL IMPROVEMENTS PLAN – 2012

FIBER OPTICS FUND:

Fiber Extensions – Customer Installations
Location: ***Within the L&P service area***
Character: ***Fiber optic facilities extending from current facilities.***
Extent: ***Costs related to line extensions to customer facilities (either overhead or underground)***
Estimated Cost: ***$450,000***
Fiscal Year(s): ***2012-13 through 2017-18 (Annual program)***

Wi-Fi Project
Location: ***Within the L&P service area***
Character: ***Upgrade of facilities to allow for Wi-Fi (wireless internet access)***
Extent: ***Costs related to installing facilities that allow for open area wireless internet access, or "hot zones" in the DDA/TIF Districts.***
Estimated Cost: ***$160,000***
Fiscal Year(s): ***2012-13***

TRAVERSE CITY LIGHT & POWER

SIX YEAR CAPITAL IMPROVEMENTS PLAN 2012

(This worksheet is for illustration purposes only and is supplemental information to the Plan)

		Fiscal Year 2012-13	Fiscal Year 2013-14	Fiscal Year 2014-15	Fiscal Year 2015-16	Fiscal Year 2016-17	Fiscal Year 2017-18	Project Totals	Project Notes	2011 Funding Level	Change
INTERNAL FINANCING:											
Generation:											
no change	Community Solar - 50KW	$ 400,000	---	---	---	---	---	$ 400,000		$ 400,000	$ -
Total Generation		400,000	0	0	0	0	0	400,000		400,000	0
Distribution and Substation:											
no change	Line Improvements, Extensions, New Services	950,000	1,000,000	1,050,000	1,100,000	1,150,000	1,100,000	6,350,000	Annual Program	$ 6,275,000	$ 75,000
CHANGE	OH to URG Conversion Projects (funding was combined with Distribution Circuit Rebuild line item)	---	---	---	---	---	---	0		$ 6,500,000	$ (6,500,000)
CHANGE	Distribution Circuit Additions/Upgrades (extent - circuit rebuild was removed and listed as a separate project.)	900,000	900,000	900,000	900,000	900,000	900,000	5,400,000	Annual Program	$ 11,300,000	$ (5,900,000)
NEW	Distribution Circuit Rebuild	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	1,900,000	11,400,000		$ -	$ 11,400,000
no change	69kV/13.8kV Distribution Substation-SOUTH	3,800,000	---	---	---	---	---	3,800,000		$ 5,000,000	$ (1,200,000)
no change	Street Lighting System Additions	100,000	---	---	---	---	---	100,000		$ 225,000	$ (125,000)
NEW	Street Lighting (LED) System Replacements	160,000	160,000	160,000	160,000	160,000	160,000	960,000	Annual Program	$ -	$ 960,000
no change	Pine Street Overhead to Underground Conversion	500,000	500,000	---	---	---	---	1,000,000	With TIF 97 Project	$ 1,000,000	$ -
Total Distribution and Substation		8,310,000	4,460,000	4,010,000	4,060,000	4,110,000	4,060,000	29,010,000		30,300,000	(1,290,000)
Transmission and Substation:											
no change	69kV Load Break Switches	---	---	200,000	200,000	200,000	---	600,000		$ 600,000	$ -
no change	69kV Transmission Line & Substation - EAST	4,500,000	---	---	---	---	---	4,500,000		$ 5,200,000	$ (700,000)
no change	Transmission Line Reconductor	---	---	575,000	1,000,000	1,500,000	600,000	3,675,000		$ 3,675,000	$ -
Total Transmission and Substation		4,500,000	0	775,000	1,200,000	1,700,000	600,000	8,775,000		9,475,000	(700,000)
Facilities:											
no change	M-72 Wind Turbine Refurbishment	---	---	---	150,000	---	---	150,000		$ 150,000	$ -
no change	Hasting Service Center Facility Improvements	580,000	500,000	50,000	50,000	50,000	50,000	1,280,000	Annual Program	$ 2,750,000	$ (1,470,000)
Total Facilities		580,000	500,000	50,000	200,000	50,000	50,000	1,430,000		2,900,000	(1,470,000)
SCADA, Communications, and Other Items:											
no change	Smart Metering Technologies (AMI)	200,000	200,000	200,000	50,000	50,000	50,000	750,000	Annual Program	$ 650,000	$ 100,000
no change	SCADA/Dispatch Improvements	150,000	---	---	---	---	---	150,000		$ 250,000	$ (100,000)
Total SCADA, Communications & Other Items		350,000	200,000	200,000	50,000	50,000	50,000	900,000		900,000	0
TOTAL INTERNAL FINANCING		$ 14,140,000	$ 5,160,000	$ 5,035,000	$ 5,510,000	$ 5,910,000	$ 4,760,000	$ 40,515,000		$ 43,975,000	$ (3,460,000)
FIBER FUND PROJECTS:											
no change	Fiber Extensions - Customer Installations	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 450,000	Annual Program	$ 450,000	$ -
no change	Wi-Fi Project - DDA	160,000	---	---	---	---	---	160,000		$ 160,000	$ -
Total Fiber Fund Projects		$ 235,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 610,000		$ 610,000	$ -

(Actual fiscal year that a project may be undertaken may differ from the fiscal year depicted in this spreadsheet. Dollar amounts are estimates.)

City of Traverse City, Michigan
TRAVERSE CITY LIGHT & POWER DEPARTMENT
2012-13 Budgeted Revenues and Expenses Summary

	FY 10/11 Actual	FY 11/12 Budgeted	FY 11/12 Projected	FY 12/13 Recommended
Operating Income:	$ 30,253,236	$ 33,201,550	$ 31,066,550	$ 31,508,000
Operating Expenses:				
Generation Expenses:				
MPPA/MISO Purchased Power	$ 2,917,452	$ 1,200,000	$ 1,000,000	$ 60,000
Lansing Purchased Power	4,056,945	7,200,000	6,500,000	6,100,000
Stoney Corners - Wind Energy	1,892,441	1,595,000	1,810,000	2,900,000
Combustion Turbine Power Cost	4,216,734	3,750,000	4,400,000	4,500,000
Cambell #3 Power Cost	3,322,056	3,670,000	4,575,000	4,000,000
Belle River #1 Power Cost	3,087,679	3,500,000	3,803,000	3,700,000
Landfill Gas - Granger Project	113,117	90,000	120,000	160,000
Other Generation Expenses	467,924	472,900	71,450	84,750
Total Generation Expenses	20,074,348	21,477,900	22,279,450	21,504,750
Distribution Expenses:				
Operations & Maintenance	3,276,966	3,449,250	3,613,350	3,612,100
Transmission Expenses:				
Operations & Maintenance	196,729	246,000	191,000	206,350
Other Operating Expenses:				
Metering & Customer Accounting	545,267	632,050	536,000	550,000
Conservation & Public Services	707,312	1,419,600	995,000	2,081,850
Administrative & General	1,320,067	1,276,900	1,079,550	1,298,250
Insurance	71,315	72,800	52,050	66,500
Depreciation Expense	1,732,080	1,715,000	1,775,000	1,875,000
City Fee	1,511,219	1,687,850	1,556,800	1,578,200
Total Other Operating Expenses	5,887,259	6,804,200	5,994,400	7,449,800
Total Operating Expenses	29,435,302	31,977,350	32,078,200	32,773,000
Operating Income/Loss	$ 817,934	$ 1,224,200	$ (1,011,650)	$ (1,265,000)
Non Operating Revenues/(Expenses):				
Non Operating Revenues	718,340	805,800	501,700	360,000
Non Operating Expenses	(22,324)	0	(172,050)	0
Total Non Operating Revenue/(Exp)	696,016	805,800	329,650	360,000
Net Income	$ 1,513,949	$ 2,030,000	$ (682,000)	$ (905,000)

City of Traverse City, Michigan
TRAVERSE CITY LIGHT & POWER
2012-13 Budgeted Revenues and Expenses

	FY 10/11 Actual	FY 11/12 Budgeted	FY 11/12 Projected	FY 12/13 Recommended
OPERATING REVENUES:				
Federal Grants	$ 250,000	$ -	$ (5,050)	$ -
State Grants	27,623	-	-	-
Residential Sales	5,421,674	6,207,000	5,295,000	5,380,000
Commercial Sales	13,587,206	15,085,000	13,921,000	14,130,000
Industrial Sales	8,321,852	8,985,000	9,131,000	9,205,000
Public Authority Sales	232,115	272,000	215,600	220,100
Street Lighting Sales	199,785	195,000	195,000	195,000
Yard Light Sales	82,004	86,600	76,000	78,400
Forfeited Discounts	55,757	53,400	51,000	51,500
Merchandise and Jobbing	145,548	177,900	55,000	75,000
Recovery of Bad Debts	80	500	-	-
Sale of Scrap	18,682	21,400	19,500	18,000
Miscellaneous Income	19,647	17,750	12,500	13,000
MISO Revenue	1,891,263	2,100,000	2,100,000	2,142,000
TOTAL OPERATING REVENUES	$ 30,253,236	$ 33,201,550	$ 31,066,550	$ 31,508,000
OPERATING EXPENSES:				
GENERATION-OPERATING & MAINTENANCE:				
Wind Generation - Traverse	$ 13,633	$ 16,000	$ 18,000	$ 15,000
Brown Bridge	932	-	1,600	-
Wind Generation Farm	11,897	5,000	1,850	-
Trap and Transfer	-	1,000	1,000	1,000
Union Street Fish Ladder	-	250	250	250
Kalkaska Combustion Turbine	378,527	225,000	-	-
Sabin Dam	885	900	-	-
Boardman Dam	1,179	900	-	-
Operation Supplies	837	1,500	900	1,100
MPPA/MISO Purchased Power	2,917,452	1,200,000	1,000,000	60,000
Lansing Purchased Power	4,056,945	7,200,000	6,500,000	6,100,000
Stoney Corners - Wind Energy	1,892,441	1,595,000	1,810,000	2,900,000
Combustion Turbine Power Cost	4,216,734	3,750,000	4,400,000	4,500,000
Campbell #3 Power Cost	3,322,056	3,670,000	4,575,000	4,000,000
Belle River #1 Power Cost	3,087,679	3,500,000	3,803,000	3,700,000
Landfill Gas - Granger Project	113,117	90,000	120,000	160,000
Total Purchased Power	*19,606,424*	*21,005,000*	*22,208,000*	*21,420,000*
Puchased Power Cost as % of Sales	*70.4%*	*68.1%*	*77.0%*	*73.3%*
Coal Dock	4,221	4,500	5,000	5,000
Communications	351	550	350	400
Safety	4,000	4,200	8,000	8,000
Tools	282	1,500	750	1,000
Professional and Contractual	45,741	210,000	31,000	50,000
Professional Development	4,998	750	2,500	2,500
TCLP Equipment Maintenance	388	750	250	500
Miscellaneous	53	100	-	-
Total Generation O & M	20,074,348	21,477,900	22,279,450	21,504,750

City of Traverse City, Michigan
TRAVERSE CITY LIGHT & POWER
2012-13 Budgeted Revenues and Expenses

	FY 10/11 Actual	FY 11/12 Budgeted	FY 11/12 Projected	FY 12/13 Recommended
DISTRIBUTION OPERATION & MAINTENANCE:				
Office Supplies	4,305	8,200	4,200	4,500
Operation Supplies	34,034	39,450	35,100	36,000
Utilities	48,588	44,500	52,350	54,000
Communications	17,214	18,400	17,400	18,500
Supervision and Maintenance	700,400	725,000	595,000	600,000
Substation	149,903	237,350	205,000	207,000
Overhead Lines	515,483	525,850	545,000	550,000
Storm Damage Contingency	-	-	150,000	100,000
Load and Dispatching	575,341	578,500	571,000	575,000
Underground Lines	175,280	163,700	297,000	300,000
Customer Installations	32,985	44,450	34,000	35,000
Electric Meters	58,881	71,200	60,000	61,500
Street Lighting	277,541	282,250	286,800	290,000
Traffic Signal Oper. & Maint.	144,094	156,100	159,000	163,000
Radio Equipment	2,274	1,900	2,000	2,100
Plant & Structures	172,101	211,900	200,000	205,000
Shop Labor	139,682	93,900	185,000	191,000
Safety	35,395	33,850	63,000	65,000
Tools	17,124	18,750	18,750	19,500
Professional and Contractual	37,055	34,000	37,000	38,500
Rent Expense	2,341	3,100	5,000	2,500
Professional Development	135,075	155,100	89,000	92,000
Printing and Publishing	1,832	1,550	1,550	1,700
Miscellaneous	399	250	200	300
Inventory Adjustments	(361)	-	-	-
Total Distribution O & M	3,276,966	3,449,250	3,613,350	3,612,100
TRANSMISSION OPERATIONS & MAINTENANCE:				
Supervision & Maintenance	21,035	19,050	27,000	28,350
Substation	40,357	60,000	35,000	37,500
Overhead Lines	13,589	39,300	10,000	15,000
Load and Dispatching	57,860	57,650	60,000	62,500
Underground Lines	94	200	-	-
MISO Transmission	20,598	20,400	22,000	23,000
Professional and Contractual	-	-	-	-
Miscellaneous-MPPA Transmission Project	43,195	49,400	37,000	40,000
Total Transmission O & M	196,729	246,000	191,000	206,350
METERING & CUSTOMER ACCOUNTING:				
Salaries and Wages	288,025	275,000	274,200	275,000
Fringe Benefits	135,503	158,500	124,000	129,200
Office Supplies	5,888	4,750	5,000	5,200
Operation Supplies	-	-	-	-
Communications	590	850	250	300
Meal Payments	188	200	100	150
Safety	-	100	-	-

City of Traverse City, Michigan
TRAVERSE CITY LIGHT & POWER
2012-13 Budgeted Revenues and Expenses

	FY 10/11 Actual	FY 11/12 Budgeted	FY 11/12 Projected	FY 12/13 Recommended
Uniforms	2,138	2,550	3,200	3,350
Professional and Contractual	7,993	42,350	22,000	23,400
Postage	36,113	35,350	36,900	38,000
Uncollectable Accounts	19,454	66,300	21,500	25,000
Collection Costs	415	550	450	500
Data Processing	19,572	20,500	22,000	22,500
Transportation	5,370	5,050	6,000	6,200
Professional Development	4,690	2,500	2,600	2,500
Printing and Publishing	4,405	4,250	6,800	7,000
Vehicle Rentals	13,843	12,300	9,900	10,500
Miscellaneous	1,081	950	1,100	1,200
Total Customer Accounting	545,267	632,050	536,000	550,000
CONSERVATION & PUBLIC SERVICES:				
Professional and Contractual	35,834	120,000	80,000	60,000
Contract Labor - Energy Optimization	-	150,000	100,000	100,000
Public Service & Communications	74,854	203,500	60,000	60,000
Marketing & Public Services	99	-	-	-
In-Kind Community Services	76,160	70,100	75,000	77,500
Community Investment Fund	55,350	-	-	1,000,000
CFL Grant Expense	30,817	-	-	-
LED Street Lighting Grant Expense	123,722	-	-	-
Energy Audits	-	-	-	-
Increased Energy Optimization Efforts	-	350,000	280,000	300,000
PA295 Energy Optimization Compliance	310,475	526,000	400,000	484,350
Total Conservation & Public Services	707,312	1,419,600	995,000	2,081,850
ADMINISTRATIVE AND GENERAL:				
Salaries and Wages	760,912	760,300	651,000	665,000
Fringe Benefits	253,317	261,800	175,800	202,750
Office Supplies	7,871	8,450	9,000	9,050
Communications	7,833	7,200	7,500	8,000
Fees and Per Diem	58,009	61,700	54,000	57,000
Board Related Expenses	9,333	7,750	6,250	6,500
Professional & Contractual	74,071	11,150	80,000	230,000
Legal Services	78,262	85,000	55,000	75,000
Employee Appreciation	10,757	13,100	6,000	7,500
Rent Expense	-	-	-	-
City Fee	1,511,219	1,687,850	1,556,800	1,578,200
Transportation	7,683	4,500	2,600	3,500
Professional Development	37,033	40,400	21,400	22,450
Printing & Publishing	4,760	3,550	3,500	3,500
Insurance and Bonds	71,315	72,800	52,050	66,500
Miscellaneous	10,226	12,000	7,500	8,000
Depreciation Expense	1,732,080	1,715,000	1,775,000	1,875,000
Total Administrative and General	4,634,681	4,752,550	4,463,400	4,817,950

City of Traverse City, Michigan
TRAVERSE CITY LIGHT & POWER
2012-13 Budgeted Revenues and Expenses

	FY 10/11 Actual	FY 11/12 Budgeted	FY 11/12 Projected	FY 12/13 Recommended
Total Operating Expenses	29,435,302	31,977,350	32,078,200	32,773,000
Operating Income / (Loss)	$ 817,934	$ 1,224,200	$ (1,011,650)	$ (1,265,000)
NON OPERATING REVENUES/(EXPENSES):				
Rents and Royalties	$ 44,154	$ 45,400	$ 21,200	$ 43,000
Pole Rentals	59,435	31,750	31,750	34,500
Reimbursements	271,227	228,650	215,000	100,000
Interest & Dividend Earnings	337,679	500,000	225,000	180,000
Gain/(Loss) on Sale of Fixed Assets	(22,324)	-	(172,050)	-
Refunds and Rebates	5,845	-	8,750	2,500
Total Non Operating Revenue/(Expenses)	696,016	805,800	329,650	360,000
NET INCOME/(LOSS)	$ 1,513,949	$ 2,030,000	$ (682,000)	$ (905,000)

Traverse City Light & Power
Fiber Optics Fund
2012-13 Budgeted Revenues and Expenses

	FY 10/11 Actual	FY 11/12 Budgeted	FY 11/12 Projected	FY 12/13 Recommended
Operating revenues:				
Charges for services	$ 183,605	$ 216,850	$ 186,660	$ 186,500
Wi-fi Service Fee - DDA	-	-	-	65,000
Total operating revenues	$ 183,605	$ 216,850	$ 186,660	$ 251,500
Operating expenses:				
Office & operation supplies	$ 799	$ 2,200	$ 3,000	$ 3,250
Supervision & maintenance	28,572	15,000	63,000	66,150
Overhead & Underground lines	4,376	7,000	26,000	6,000
Customer installations	1,700	2,750	11,500	5,600
Wi-fi operations & maintenance	-	30,000	-	45,000
Termination boxes	32,839	46,200	7,300	35,400
Tools	646	900	-	-
Professional services	-	20,000	-	-
Legal services	253	500	-	-
City fee	9,180	10,800	9,350	12,600
Professional development	7,757	500	500	500
Insurance	1,263	1,300	1,350	1,450
Repair and maintenance	1,154	450	-	500
Vehicle rental	-	-	-	-
Miscellaneous	-	150	-	150
Depreciation expense	85,409	86,500	86,700	99,800
Total operating expenses	$ 173,948	$ 224,250	$ 208,700	$ 276,400
Operating income/(loss)	$ 9,657	$ (7,400)	$ (22,040)	$ (24,900)
Non-operating revenues:				
Reimbursements	34,392	86,500	19,612	75,900
Net income	$ 44,049	$ 79,100	$ (2,428)	$ 51,000

Traverse City Light & Power

Cash Flow Forecast

Fiscal Year:	Audited 2010/11	Budget Projected 2011/12	Budget Recommended 2012/13	Estimate 2013/14	Estimate 2014/15	Estimate 2015/16	Estimate 2016/17	Estimate 2017/18
Receipts								
Operating Revenues	29,981,458	31,066,550	31,508,000	32,738,160	35,892,923	36,610,782	37,342,997	38,089,857
Non Operating Revenues	967,793	501,700	360,000	367,200	374,544	382,035	389,676	397,469
Total Receipts	**30,949,251**	**31,568,250**	**31,868,000**	**33,105,360**	**36,267,467**	**36,992,817**	**37,732,673**	**38,487,326**
Payments								
Generation Expense	20,074,348	22,279,450	21,504,750	21,934,845	22,873,542	25,160,896	25,664,114	26,177,396
Distribution Expense	3,276,966	3,613,350	3,612,100	3,702,403	3,794,963	3,889,837	3,987,083	4,086,760
Transmission Expense	196,728	191,000	206,350	211,509	216,796	222,216	227,772	233,466
Metering & Customer Accounting	545,269	536,000	550,000	563,750	577,844	592,290	607,097	622,275
Conservation & Public Service	707,311	995,000	2,081,850	1,133,896	1,162,244	1,191,300	1,221,082	1,251,609
Administrative & General	1,320,066	1,079,800	1,207,800	1,087,995	1,115,195	1,143,075	1,171,652	1,200,943
Insurance	71,315	52,050	66,500	68,163	69,867	71,613	73,404	75,239
City Fee	1,511,219	1,556,800	1,578,200	1,617,655	1,733,096	1,776,424	1,820,834	1,866,355
Capital Investments	2,636,982	4,850,000	14,140,000	5,160,000	5,035,000	5,510,000	5,910,000	4,760,000
Total Payments	**30,340,204**	**35,153,450**	**44,947,550**	**35,480,215**	**36,578,546**	**39,557,650**	**40,683,037**	**40,274,043**
Cashflow Surplus/Deficit (-)	**609,047**	**(3,585,200)**	**(13,079,550)**	**(2,374,855)**	**(311,079)**	**(2,564,834)**	**(2,950,364)**	**(1,786,716)**
Opening Cash & Investments Balance	**28,987,599**	**29,596,646**	**26,011,446**	**12,931,896**	**10,557,041**	**10,245,962**	**7,681,128**	**4,730,764**
Closing Cash & Investments Balance	**29,596,646**	**26,011,446**	**12,931,896**	**10,557,041**	**10,245,962**	**7,681,128**	**4,730,764**	**2,944,048**

TRAVERSE CITY
LIGHT & POWER

To: Light & Power Board
From: Blake Wilson, Field Engineer
Date: March 20, 2012
Subject: Bids for Tree Trimming Services

Bids have been obtained for annual tree trimming services on TCL&P's utility system. Bid pricing were for hourly, weekly, and yearly rates for a two person crew with truck, chipper and other related equipment for the purpose of line clearance tree trimming. Circuits CD-21, BW-23, HL-23, HL-33 and HL-32, along with TCL&P's transmission, fiber system and other various locations, are to be trimmed under this contract. Bid requests were sent out to nine companies, they were as follows:

		Time and Material Costs	
Bidder	**Yearly Cost**	**Hourly**	**Weekly**
Penn Line Services, Inc.	$145,600.00	$70.00	$2,800.00
Nelson Tree Service	$146,619.20	$70.49	$2,819.20
Asplundh Tree Expert Co.	$147,804.80	$71.06	$2,842.40
Trees, Inc.	$154,440.00	$74.20	$2,970.00
NG Gilbert	$179,358.40	$86.23	$3,449.20
The Energy Group	NO BID	N/A	N/A
Townsend	NO BID	N/A	N/A
A-1 Professional Tree Service	NO BID	N/A	N/A
Alpine Tree Service	NO BID	N/A	N/A

Staff recommends selecting Penn Line Services, Inc. as they are the low bidder for the defined work scope.

If the Board is in agreement, the following motion is recommended:

MOVED BY _____, SECONDED BY_____,

THAT THE BOARD AUTHORIZE THE CHAIRMAN AND THE SECRETARY TO ENTER INTO A TREE TRIMMING SERVICES AGREEMENT WITH PENN LINE SERVICES, INC., AT A HOURLY/WEEKLY RATE OF $70 AND $2,800 RESPECTIVELY FOR THE DURATION OF ONE YEAR; SUBJECT TO APPROVAL AS TO FORM BY GENERAL COUNSEL. NOT TO EXCEED $170,000.