

**A REGULAR MEETING**  
**Of The**  
**TRAVERSE CITY LIGHT AND POWER BOARD**

**Will Be Held On**  
**TUESDAY, November 10, 2015**

**At**  
**5:15 p.m.**

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

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

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(231) 922-4940 ext. 201

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

Posting Date: 11-05-15  
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.*

None.

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

None.

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

- a. Consideration of approving minutes of the Regular Meeting of October 13, 2015. (p. 3)

#### **5. Appointments**

- a. Consideration of appointments to the HR Ad Hoc Committee. (Arends)

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

- a. From Legal Counsel.
- b. From Staff.
  - 1. Presentation of distributed generation information (net metering) and line extension policy. (Arends/Utility Financial Solutions) (p. 5)
  - 2. Downtown Christmas lights. (Arends) (p. 32)
  - 3. Cherryland Electric Consulting Agreement and Manager of Operations & Engineering search update. (Arends) (p. 33)
- 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, October 27, 2015

**Board Members -**

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

**Ex Officio Member -**

Present: Marty Colburn, City Manager

**Others:** Tim Arends, Scott Menhart, Karla Myers-Beman, Kelli Schroeder, Rod  
Solak, Stephanie Tvardek, Jessica Wheaton, Blake Wilson

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

Chairman Taylor recognized City Commissioner Barbara Budros and City Commissioner Jim Carruthers for their years of service on the Light and Power Board.

5:17 p.m. Bob Spence joined the meeting.

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

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

- a. Minutes of the Regular Meeting of September 22, 2015.
- b. Declare items surplus.

CARRIED unanimously.

**Items Removed from the Consent Calendar**

None.

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

None.

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

None.

**Item 5 on the Agenda being Appointments**

- a. Appointment of Secretary for the Light and Power Board.

The following individuals addressed the Board:

Karla Myers-Beman, Controller

Moved by Budros, seconded by Carruthers, that Tim Arends, Executive Director, be appointed Secretary for the Light and Power Board.

CARRIED unanimously.

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

a. From Legal Counsel.

None.

b. From Staff.

1. Tim Arends provided a year end summary of the 2014-15 Capital Plan.

The following individuals addressed the Board:

Marty Colburn, City Manager

2. Kelli Schroeder provided a recap of the Open House held on October 3, 2015.

The following individuals addressed the Board:

Tim Arends, Executive Director

3. Jessica Wheaton announced the Clean Up Green Up event scheduled for November 1, 2015.

c. From Board.

1. Chairman Taylor provided an update on the coal dock issue.

The following individuals addressed the Board:

Marty Colburn, City Manager

2. Pat McGuire thanked Barbara Budros and Jim Carruthers for their service to the Light and Power Board.

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

No one from the public commented.

There being no objection, Chairman Taylor declared the meeting adjourned at 5:37 p.m.

/st

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Tim Arends, Secretary  
LIGHT AND POWER BOARD



**TRAVERSE CITY  
LIGHT & POWER**

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**To:** Light & Power Board  
**From:** Tim Arends, Executive Director (TA)  
**Date:** October 28, 2015  
**Subject:** Distributed Generation Information

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Mark Beauchamp from Utility Financial Solutions will be in attendance to provide an educational session on distributed generation impacts and cost recovery, community solar projects, information regarding the utility's Line Extension Policy and lastly to follow up on services that were discussed at the December 2014 board meeting.

Over the past two months, staff was presented proposed renewable energy projects that customers are planning to construct in the next few years with the hopes of becoming at or close to net zero facilities.

Currently, these types of projects fall under the utility's Net Metering Policy (if they are within the size allowed by the Policy), where customers are provided credit based on the retail rate for any excess generated power provided to the utility's distribution system and any energy used that was offset by the generation. By providing a credit at the retail rate, it causes the fixed charges of the system (distribution system, transmission system, customer service, metering and administration) to be spread among the other customers. The Net Metering Policy has a cap on these types of projects in order to limit the exposure of these costs to the other customers.

Staff at a later meeting will be recommending closing the Net Metering Policy and grandfathering those customers under that Policy until the useful lives of their renewable energy assets end or the termination of the agreement by the customer, whichever is earlier. Additionally, staff will be proposing a new customer generation policy based on guidance provided at this board meeting that will incorporate small and large projects within the utility. There are various items that have to be taken into consideration for this policy and they are as follows:

1. The allowable size of a renewable energy project allowed within the utility's distribution system.
2. The development of the approval and review process on the impacts, specifically reliability, the renewable energy system will have on the utility's distribution system.
3. The criteria to determine when the renewable energy system would fall under a rate tariff versus a purchase power agreement or treat them all as a purchase power agreements.
4. The rate tariff options include:
  - a. The measurement of the energy pulled and generated at gross or net.
  - b. The value of the energy generated be at local marginal pricing, wholesale rate, or avoided cost.

## FOR THE LIGHT & POWER BOARD MEETING OF NOVEMBER 10, 2015

- c. Type of consideration given during offsetting of peak times during the summer.
- d. Separate pricing be determined based on type of renewable energy.
- e. A standby fee implemented to recover the fixed costs of the distribution system.

In addition to the topic of renewable energy, Mark will be touching on the subject of a line extension policy (cost of when we extend service to our customers). Currently, the policy provides for a flat per foot rate for both residential and commercial customers with a credit provided if the customer installs the conduit.

Also at a later meeting, staff will be proposing moving from the policy's flat per foot rate to a formula that would require the Engineering Department to calculate an estimated cost of extending service to the customer and deduct the value of the customer's service within a reasonable time frame, based on the type of customer. The difference between the cost of extending service and the value of the customer's service would have to be absorbed by the customer at the time of construction. This would provide a more equitable way for line extensions to be charged and eliminate the subsidization of extensions among customers.

The last item was to confirm the services discussed last year at the rate discussion held in December 2014. These include proposed closure of rates, creation of AMI rate structure, and standby rate for snowbirds in the community.

Following this memorandum is Mark's presentation.

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## Traverse City Rate Design Considerations

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E: mbeauchamp@ufsweb.com



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## Current Issues

- Distributed Renewable Generation
  - Value of solar generation to utility
- Retail Compensation for Generation
  - Avoided cost vs. net metering
- Current Rate Structures
  - How we got here
  - Cross subsidization
- Cost Based Rate Structures
  - How to get there

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## **Disruptive Challenges to Electric Industry**

- Disruptive technologies are emerging that may compete with utility-provided services.
  - Solar photovoltaics (PV)
  - Battery storage
  - Fuel cells
  - Geothermal energy systems
  - Wind
  - Micro turbines
  - Electric vehicle (EV) enhanced storage

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## **Disruptive Challenges to Electric Industry**

- As the cost curve for these technologies improve, they could directly threaten the centralized utility model.
- Subsidized Growth of these technologies
  - Tax incentives
  - Renewable portfolio standards
  - Net metering
  - Utility pricing structures allowing customers to engage in the use of new technologies, while shifting costs to remaining non-participating customers.

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## Disruptive Challenges to Electric Industry

- Decoupling not a fix but shifts costs to other users tends to be kWh based
- Demand side management reduces kWh and may reduce demand
- Solar will not reduce demand compared to reduction in energy
- Time of use rates without demand is not an answer to the problem but will make subsidy worse under net metering

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## What is Distributed Generation?

- Customer installed generation units:
  - Small Hydro
  - Biomass
  - Biogas
  - Solar
  - Wind
  - Geothermal

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## Micro Grid

- Small-scale, localized distribution systems that allow integration of both renewable *and* traditional energy sources.
- Touted as the future in local energy distribution
  - Save money
  - Reduce our carbon footprint
- Micro-Grids generate, distribute and regulate electricity flow at a local level
- Still connected to the greater electricity grid.

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## Micro Grid

- Micro-grids allow consumers to meet some, or all, of their energy needs through their generation
- Micro-grids have the ability to disengage from the main grid and operate independently
- In the event of a power outage in the main grid, micro-grids can simply cut their connection and continue to function normally on a local level.

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## Industry Impacts

- Customer installed generation in high concentrations can impact the quality, reliability and safety of the electric system
  - Quality
    - DG may not have a power factor problem but can create a problem:
      - Power Factor is constant but loads are reduced
      - Energizing and de-energizing lines
  - Reliability – Intermittent Loads
  - Safety – Utility may not control the back-feed to electricity

## Industry Impacts

- Utility cannot respond to dramatic changes in load to maintain reliability
  - Solar production at 2PM then a cloud comes over, utility cannot respond that quickly to the change in the load
  - Cost to install batteries to maintain reliable system

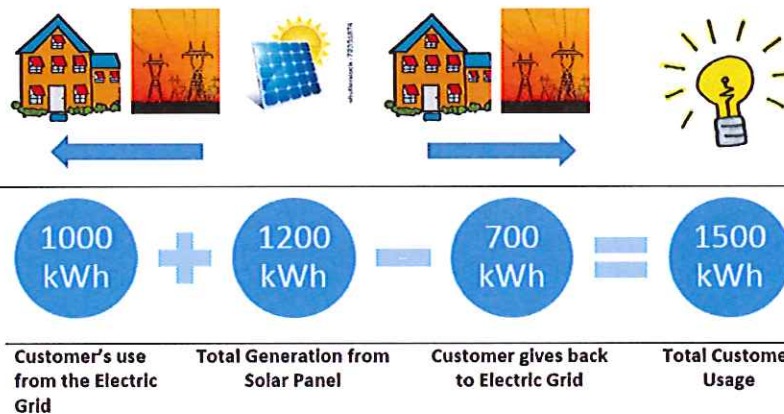
# Financial Impacts

- Will create financial statement impacts and cross subsidization in rates if utility rates are not structured to recover the costs
  - Distribution Costs
    - Structure rates properly!!!
  - Power Supply Costs
    - Recovered through a power cost adjustment
    - Excess sold to the market
    - Utility Purchases its power supply

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## Determine Customer Usage



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## Determination of Customer's Charges Avoided Cost Compensation

Meter in	1,000	a
Meter Out	700	b
Production from Solar Unit	1,200	c
Customers Usage	1,500	a + c - b
<b>Utility Rates</b>		
Facilities Charge	\$ 10.00	
<b>Energy Rates KWH</b>		
First 500 kWh's	0.08	
Next 500 kWh's	0.12	
Excess kWh's	0.16	
Credit for Excess Generation	0.06	
<b>Customer Charges</b>		
Facilities Charge	\$ 10.00	
First Block Charges	40.00	
Second Block Charges	60.00	
Third Block Charges	80.00	
Credit for Generation	(72.00)	
<b>Customers Monthly Charges</b>	<b>118.00</b>	

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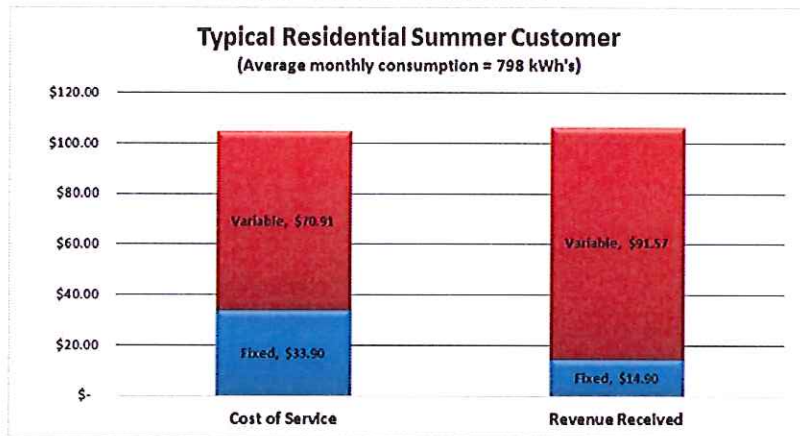
## Determination of Customer's Charges Net Metering

Meter in	1,000	a
Meter Out	700	b
<b>Customer KWH Usage for billing</b>	<b>300</b>	<b>a-b</b>
<b>Utility Rates</b>		
Facilities Charge	\$ 10.00	
<b>Energy Rates KWH</b>		
First 500 kWh's	0.08	
Next 500 kWh's	0.12	
Excess kWh's	0.16	
<b>Customer Charges</b>		
Facilities Charge	\$ 10.00	
First Block Charges	24.00	
Second Block Charges	-	
Third Block Charges	-	
<b>Total Charge</b>	<b>\$ 34.00</b>	

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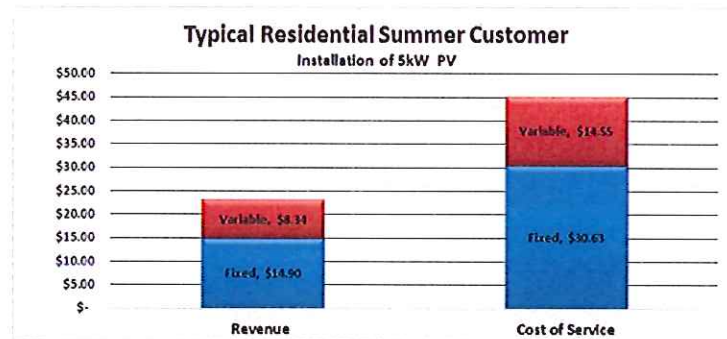
## Comparison of Fixed and Variable



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## Comparison of Fixed and Variable After Net Metering

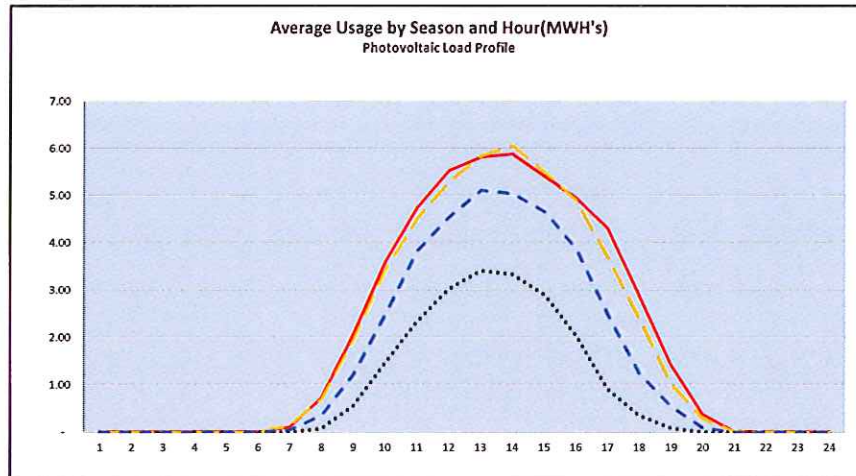


Comparison with Utility that Purchases Power Supply  
PV unit installation - 5kW  
Midwest PV Unit - 2013 data  
PV production - 725 kWh  
Customer's Peak Distribution Demand - Before PV - 5.16 kW, after PV 3.59 kW  
Customer Peak to System Demands - Before PV 2.11 kW, after PV 0.61 kW

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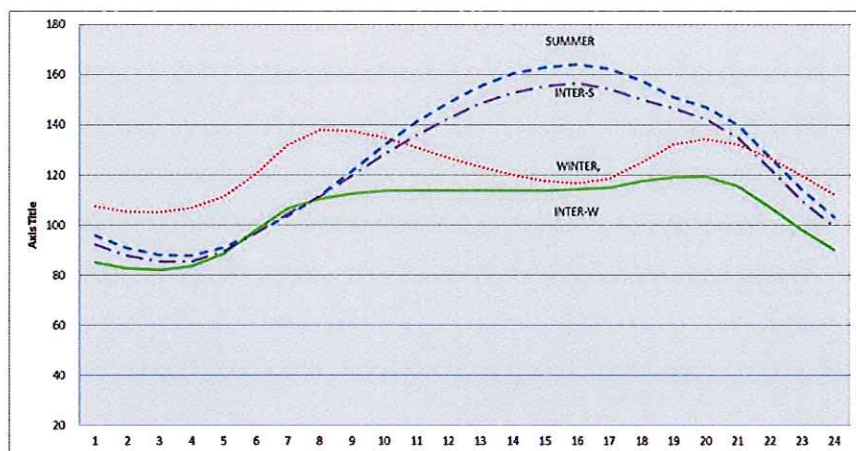
# Photovoltaic Load Profile



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# Utility System Load Profile



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## PV Production at Utilities Peak – Example

Month	kwh Produced	Reduction in Peak Demand	System Peak Hour	System Peak Date
January	565	0.0	8	1/14/2013
February	670	0.8	8	2/13/2013
March	791	1.8	8	3/4/2013
April	1,217	6.9	16	4/21/2013
May	1,348	7.2	16	5/28/2013
June	1,508	7.0	16	6/22/2013
July	1,538	7.2	16	7/31/2013
August	1,430	7.2	16	8/5/2013
September	1,241	6.1	16	9/4/2013
October	1,045	5.4	16	10/1/2013
November	733	1.5	18	11/27/2013
December	454	0.0	8	12/4/2013

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## Power Supply Charges

- Demand Charges - \$17.00/kW Peak Demand
  - Includes production and transmission
- Energy Charges – 0.035/KWH

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## Value of Solar Example One

		Power Supply	
	Reduction	Rates	Savings
Demand	43.88	17.00	745.90
Energy	12,539.50	0.035	438.88
Power Supply Savings			1,185
Loss Adjustment			1,250
Value of Solar - kWh			0.100

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## Value of Solar Example Two

Month	Average Production during On-Peak Hours	System Peak Hour	System Peak Date
January	-	19	1/14/2013
February	-	19	2/13/2013
March	-	20	3/4/2013
April	2.0	21	4/21/2013
May	2.0	17	5/28/2013
June	5.8	17	6/22/2013
July	6.1	17	7/31/2013
August	6.1	17	8/5/2013
September	5.8	17	9/4/2013
October	2.0	16	10/1/2013
November	2.0	18	11/27/2013
December	-	19	12/4/2013

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## Value of Solar Example Two

	Reduction	Power Supply Rates	Savings
Demand	21.14	17.00	359.41
Energy	12,539.50	0.035	438.88
Power Supply Savings			798
Loss Adjustment			842
<b>Value of Solar - kWh</b>			<b>0.067</b>

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## Retail Compensation for Solar

- Avoided Cost - “buy all” “sell all”
  - Identify avoided cost credit for full solar production
  - Charge customer on utilities rate tariff for entire electric use of home

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## Current Rate Structures How We Got Here

- Metering capabilities
- Reluctance to charge cost based rate structures:
  - Low Customer Charges
  - Inverted Block Rate Structures not set based on cost
  - Lack of understanding/desire by regulatory authorities To implement cost-base rate structures
  - Social Issues
  - Environmental issues

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## How Subsidies are Created

- Customers are using a certain amount of energy from the distribution system creating demands that drive the sizing of the infrastructure
- When they pay on net usage they are only paying for a portion of the distribution infrastructure they are using
- Customers with Solar tend to have peak demands that are almost the same as a regular residential customer
  - Residential customers tend to peak near sunset

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## Changing Residential Usage Patterns

- Today's residential customers are not all the same
  - LED lights, smart thermostats, plug-in electric vehicles, rooftop solar, demand-flexible water heaters, battery energy storage, and myriad of other technologies that make their loads and consumption patterns potentially very different.
  - It is becoming less expensive to meter these differences, including time of use and identifying a customer's peak demand.

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## Identify Cost Based Residential Rate Structure

- Customer Charge
- Demand or kVa charge for distribution recovery
- Time of Use energy rates
- Coincident Demand Rates

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## Example: Cost-Based Residential Rate Structure

Cost Based Rate Design	Customer Rates
Power Supply Customers Demand Coincident with System Peak	12.72
Distribution Recovery Based on Customers Maximum Demand	2.19
Energy Charge	0.0442
Customer Charge	21.44
PILOT	9.28%

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## Cost of Service Customer Charge includes the following Components

- Distribution costs do not vary with kWh usage
  - Meter operation, maintenance and replacement costs
  - Meter reading costs or AMR installation costs
  - Billing Costs
  - Customer Service Department
  - Service into customers facilities
  - Portion of Distribution System

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## Customer (Facilities) Charges

- Increasing customer charges helps stabilize revenues
- Reduces subsidy between year-round customers and seasonal customers
- Will impact low use customers
- Low income compared with low use

*At most utilities, low income customers tend to be higher than average users. A higher customer charge may benefit low income*

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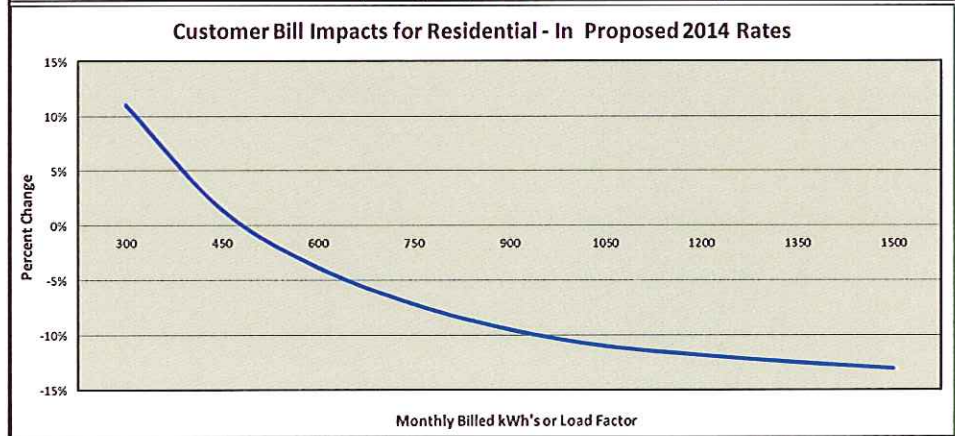
## Monthly Customer Charges

Customer Class	Current Customer Charge	COS Customer Charge	Difference
Residential	\$ 6.80	\$ 16.83	\$ 10.03
General Service	10.80	84.80	\$ 74.00
Large Power	50.00	154.51	\$ 104.51

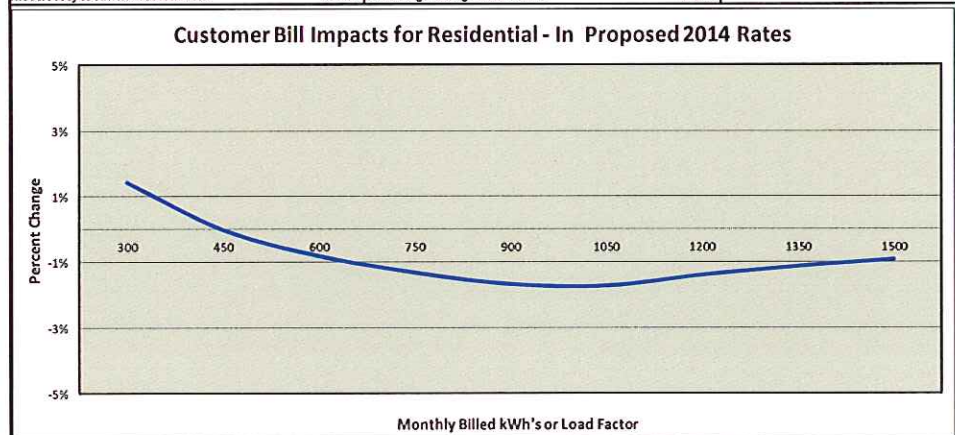
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Current Rates		Proposed 2014 Rates		Cost of Service Rates	
Monthly Customer Charge:		Monthly Customer Charge:		Monthly Customer Charge:	
All Customers	\$ 6.80	All Customers	\$ 16.83	All Customers	\$ 16.83
Energy Charge:		Energy Charge:		Energy Charge:	
Winter Block 1 (0 - 1000 kWh)	\$ 0.0744	Winter Block 1 (0 - 1000 kWh)	\$ 0.0835	Winter	\$ 0.0750
Winter Block 2 (1001 - Excess kWh)	\$ 0.0700	Winter Block 2 (1000 - Excess kWh)	\$ 0.0835	Summer	\$ 0.0890
Summer Block 1 (0 - 1000 kWh)	\$ 0.0744	Summer Block 1 (0 - 1000 kWh)	\$ 0.0800		
Summer Block 2 (1001 - Excess kWh)	\$ 0.0700	Summer Block 2 (1000 - Excess kWh)	\$ 0.0800		
Fuel Adjustment(PCA) (0 - 0 kWh)	\$ 0.01862	Fuel Adjustment(PCA) (0 - 0 kWh)	\$ -		
Revenues from Current Rates	\$ 4,597,848	Revenues from Proposed Rates	\$ 4,598,664	COS Revenues	\$ 4,915,075
Model Profit to Financial Statements	0.23%	Percentage Change from Current	0.02%		



Current Rates		Proposed 2014 Rates		Cost of Service Rates	
Monthly Customer Charge:		Monthly Customer Charge:		Monthly Customer Charge:	
All Customers	\$ 6.80	All Customers	\$ 8.30	All Customers	\$ 16.83
Energy Charge:		Energy Charge:		Energy Charge:	
Winter Block 1 (0 - 1000 kWh)	\$ 0.0744	Winter Block 1 (0 - 1000 kWh)	\$ 0.0880	Winter	\$ 0.0750
Winter Block 2 (1001 - Excess kWh)	\$ 0.0700	Winter Block 2 (1000 - Excess kWh)	\$ 0.0880	Summer	\$ 0.0890
Summer Block 1 (0 - 1000 kWh)	\$ 0.0744	Summer Block 1 (0 - 1000 kWh)	\$ 0.0930		
Summer Block 2 (1001 - Excess kWh)	\$ 0.0700	Summer Block 2 (1000 - Excess kWh)	\$ 0.0930		
Fuel Adjustment(PCA) (0 - 0 kWh)	\$ 0.01862	Fuel Adjustment(PCA) (0 - 0 kWh)	\$ -		
Revenues from Current Rates	\$ 4,597,848	Revenues from Proposed Rates	\$ 4,598,313	COS Revenues	\$ 4,915,075
Model Profit to Financial Statements	0.23%	Percentage Change from Current	0.01%		



## **Distribution Charge on Customer Panel Size**

- Customer charge based on amperage of customers panel
- APS charges based on 200 AMPS and over 200 AMPS

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## **Demand Charges**

- Many utilities are moving toward or considering demand charges for distribution cost recovery for Residential customers:
  - Send better price signals to customers
  - Promote electric vehicles
  - Reduce distribution subsidies for customers with solar or wind installations

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## Why Residential Demand Charges

- Promotes fairer cost allocation among ratepayers
- Motivates customers to reduce strain on the system
- Promotes adoption of new technology (e.g., load controllers, smart thermostats, battery technology), and change their behavior to respond to those price signals

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## Movement Toward Increasing/implementing Demand Charges for Distribution Costs Recovery

Method of Distribution Recovery						
Demand Rate	\$ 5.90					
kWh Charge	0.0223					
Load Factor	20.0%	30.0%	40.0%	50.0%	60.0%	
Peak Demand	1,000	1,000	1,000	1,000	1,000	
kWh's Used by Customer	146,000	219,000	292,000	365,000	438,000	
Demand Rate	5,899	5,899	5,899	5,899	5,899	
Energy Rate	3,259	4,888	6,517	8,147	9,776	
Difference	(2,640)	(1,011)	619	2,248	3,877	

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## Residential Demand Implementation

- Salt River Project (SRP) added a seasonal, inclining block demand charge to future net-metered PV customers. One reason for this was to create an incentive for customers to install west-facing PV systems, so that generation better aligns with system peak
- Westar Energy proposed a choice for residential DG customers. One of the two options entailed a lower fixed customer charge plus a demand charge
- Georgia Power has optional Residential Demand charge at \$6.53.kW

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## Residential Demand Charges Implementation

- ComEd in Illinois has promoted legislation to move all residential customers to demand charges
- Black Hills Power offers a demand charge option for all residential customers.
- Polk County Public Power District: Charges rural customers a fixed rate based on the KVA of installed transformer capacity and in urban areas implemented a demand charge
  - Demand charges started in 2015 at 50 cents and move to 1.00 in 2016.

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# Standby Rates

Service Level Rates	Secondary	Primary	Transmission
Distribution	1.68	1.62	
Substation	0.44	0.43	0.42
Transformer	0.60		-
Transmission	0.40	0.39	0.38
Generation	0.59	0.58	0.56
<b>Total Rate</b>	<b>\$ 3.68</b>	<b>\$ 3.02</b>	<b>\$ 1.36</b>

Loss Secondary to Primary 2.26%  
 Loss Primary to Transmission 2.91%

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## Develop Plan to Phase in Cost Based Rates

- Perform Cost of Service Study
- What technology is required?
  - Metering infrastructure
  - Database management system
  - Billing system
- Personnel needs?
- What education is needed?
  - Governing body
  - Customers
  - Staff
- What marketing is needed?

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## Potential Value of Community Solar

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## Objectives

- Economics of Community Solar
  - Value to Customer
  - Value to Utility
- Pricing a Community Solar System for Customers

## Why Community Solar?

- Avoid net metering issues
  - Reduce potential under-recovery of distribution costs
  - Have control over potential operational issues
  - Reduce pressure to improve rate structures
    - Customer Charge issues
    - Residential Demand
    - Residential Time of Use

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## Pricing Community Solar

- Pricing of Community Solar:
  - Customer can purchase unit
  - Utility can construct and charge customer a monthly charge
  - Utility can offer blocks of solar to customers and include on customer bills
  - Customer credited based on solar production

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# Assumptions

Assumptions	
Interest Rate	4.0%
Maintenance/Cleaning Costs Annual	12.50
Capacity Factor	17%
Upfront cost to purchase unit	\$ 1,000
Average annual production from 410 Watt Unit	600

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## Community Solar 410 Watt PV

Monthly Charge		Upfront Payment Amount				
Re-Payment Period - Years		\$ 1,000	\$ 750	\$ 500	\$ 250	\$ -
15		1.09	2.92	4.79	6.66	8.54
20		1.04	2.57	4.11	5.64	7.37
25		1.04	2.45	3.71	5.04	6.38

Average Charge per kWh - Assuming 600 kWh annual						
Re-Payment Period - Years		\$ 1,000	\$ 750	\$ 500	\$ 250	\$ -
15		0.020	0.057	0.094	0.131	0.168
20		0.020	0.051	0.081	0.111	0.141
25		0.020	0.047	0.073	0.099	0.125

Customer will be charge the customer charge and distribution rate applicable currently as follows:  
This will be revised periodically

Customer Charge	\$ 29.00
Distribution Rate	0.0147

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## Community Solar Alternative Avoided Cost

	High Value	Low Value
Customer Billed for all usage from rate tariff	\$ 105.00	\$ 105.00
Customer Charge	\$ 29.00	\$ 29.00
<b>Electric Bill before Solar Charge</b>	<b>\$ 134.00</b>	<b>\$ 134.00</b>
Solar Purchase Charge	7.17	\$ 7.17
<b>SubTotal</b>	<b>\$ 141.17</b>	<b>\$ 141.17</b>
<b>Credits for Solar Production</b>		
Solar Production - KWH's	50	50
Solar Value Credit - Rate per KWH	0.100	0.067
<b>Total Production Credit</b>	<b>\$ 5.00</b>	<b>\$ 3.35</b>
<b>Net Charge</b>	<b>\$ 136.17</b>	<b>\$ 137.82</b>

FOR THE LIGHT & POWER BOARD MEETING OF NOVEMBER 11, 2015



TRAVERSE CITY  
LIGHT & POWER

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**To:** Light & Power Board  
**From:** Tim Arends, Executive Director  
**Date:** November 2, 2015  
**Subject:** Downtown Holiday Lights

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For the past few decades Traverse City Light & Power (TCL&P) has installed and removed the holiday lights in the downtown each year. Installation is completed by Thanksgiving and removal is supposed to commence in February after the WOW! Festival. In previous years the installation and removal was a shared effort by Centel/C-Tec Cable (now Charter Communications), AT&T, and TCL&P.

The activity of decorating the downtown trees for the holidays began upon the completion of the first streetscape project on Front Street in 1989. The street lights installed have decorative outlets and there are decorative lighting circuits which were paid for by the DDA. Since the first project the activity of decorating street trees has grown to coincide with streetscapes on Union, Park, State, and now West Front Streets.

TCL&P has paid for and owns all of the lighting fixtures, the DDA pays for the monthly utility bills for the metered holiday lights; it is anticipated the City will pay the monthly utility bill for the new holiday lights along West Front Street which is outside the DDA District. In addition, TCL&P has purchased all of the new LED holiday lights in recent years in the amount of \$60,000 through its sponsorship program.

The issue before us is that TCL&P cannot sustain this activity any longer with its current workforce. The amount of time it takes the crews to both install the lights and remove them takes too much time from their core responsibilities. We have tracked the cost to the utility for equipment and employee hours over the years which average between \$30K and \$40K, annually. There have been complaints in more recent years that the trees are too sparsely lit and not looking very nice.

For these reasons I have decided to contract out the service this year to a company that does this type of work. While this remedies the burden to TCL&P crews, it does not eliminate the cost. The contract this year is \$32K with TCL&P installing lights on one block of Front Street and all of West Front Street and the contractors handling the rest. For TCL&P this limited responsibility is much more manageable. I was successful in getting some cost participation this year from the DDA in the amount of \$2,300. While this amount is quite low, they did not have it budgeted for this year. I have also asked other area utilities (Cherryland, Consumer's, and DTE) to assist financially in this effort. They all declined for business reasons. On November 10<sup>th</sup> I will be meeting with the City Manager and the DDA Director to further discuss this issue ahead of the TCL&P Board Meeting.





**TRAVERSE CITY  
LIGHT & POWER**

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**To:** Light & Power Board  
**From:** Tim Arends, Executive Director  
**Date:** November 4, 2015  
**Subject:** Cherryland Electric Consulting Agreement and Manager of Operations & Engineering Search Update

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TCL&P entered into a month-to-month consultant agreement with Cherryland Electric Cooperative on October 21, 2015 for interim professional assistance concerning engineering and operations management. Staff had an initial meeting on October 21, 2015 with Frank Siepker, Cherryland Electric's Chief Engineer, to discuss upcoming maintenance and capital projects. It was agreed upon that he would be on-site Wednesday afternoons and Friday mornings and when requested. Items that Frank has assisted with thus far include:

1. Troubleshooting the Barlow #1 Transformer LTC
2. Switching load relating to:
  - a. West Side Transmission Line energization
  - b. Maintenance of the Hall Street transformers
  - c. Pine and State Street Project
3. Assistance with preparation of the transformers energization at South Substation.
4. Providing guidance on the proposed solar projects within the Utility's distribution system

The recruitment efforts for the Manager of Operations & Engineering began with a kickoff meeting with David Little of Little and Associates on October 19, 2015 to formulate a position profile. Currently, Mr. Little is generating the "long" list of potential applicants for TCL&P's review. From this list, staff will select five to six for further background screening and interviews. We anticipate the new employee to be onboard within three months.