

**A REGULAR MEETING**

Of The

**TRAVERSE CITY LIGHT AND POWER BOARD**

Will Be Held On

**TUESDAY, August 10, 2010**

At

**5:15 p.m.**

In The

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

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

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

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

Posting Date: 08-6-10  
4:00 p.m.

**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 Study Session of July 21, 2010.
- B. Consideration of approving minutes of the Regular Meeting of July 27, 2010.
- C. Consideration of approving minutes of the Study Session of August 3, 2010.

**3. OLD BUSINESS**

None as of August 6, 2010

**4. NEW BUSINESS**

- A. Consideration of rescinding 4/21/10 Renewable Energy Resolution. (Rice)

**5. REPORTS AND COMMUNICATIONS**

- A. From Legal Counsel:

None as of August 6, 2010

- B. From Staff:

(1) Update on Energy Optimization efforts. (Rice and Cooper)

- C. From Board:

None as of August 6, 2010

**6. PUBLIC COMMENT**

/st

**TRAVERSE CITY  
LIGHT AND POWER BOARD**

Minutes of Light and Power Board Study Session  
Held at 5:30 p.m., Light and Power Service Center  
Tuesday, July 21, 2010

**LIGHT AND POWER BOARD MEMBERS -**

Present: Mike Coco, Linda Johnson, John Welch, John Snodgrass, John Taylor, Ralph Soffredine, Jim Carruthers

**EX OFFICIO MEMBER -**

Present: R. Ben Bifoss

**OTHERS:** Ed Rice, Tim Arends, Stephanie Tvardek, Jim Cooper, Jessica Wheaton, Karen Feahr, Glen Dine, Denise Kuschell

The meeting was called to order at 5:30 p.m. by Chairman Coco.

**1. Review of Light and Power's strategic plan.**

Ed Rice made a presentation to the Board regarding our current strategic goals, and possible generation options.

Chairman Coco called a 5 minute recess at 6:52 p.m.

Chairman Coco called the meeting to order at 7:02 p.m.

**Public Comment**

- Tom Karas, 8801 Sectionline Rd., Non-Ratepayer
- Jim Dulzo, 556 Case Rd., Beulah, Non-Ratepayer
- Laura Shea, 505 E. State St., Ratepayer
- Greg Reisig, 613 Ottawa, Elk Rapids, Northern Michigan Environmental Action Council, Non-Ratepayer
- Ann Rogers, 1236 Peninsula Dr., Ratepayer
- Mike Powers, 604 Grant St., SEEDS, Ratepayer
- Brian Beauchamp, 800 Cottageview Dr., Michigan Land Use Institute, Non-Ratepayer
- Randy Smith, Bunker Hill Rd., Williamsburg, Non-Ratepayer
- Rick Buckhalter, 932 Kelly St., Ratepayer

Board and staff reviewed and discussed possible revisions to the current strategic goals.

Board suggested Goal #6 be revised to read "Serve as a leader in energy efficiency."

It was agreed to discuss the revision of the remaining goals at a later meeting to be scheduled.

Ed Rice asked for direction from the Board regarding generation options. It was the consensus of the Board to no longer consider Biomass a generation option at this time.

**2. Public Comment**

- Laura Shea, 505 E. State St., Ratepayer

Meeting adjourned at 9:18 p.m.

/st

---

Edward E. Rice, Secretary  
LIGHT AND POWER BOARD

**TRAVERSE CITY  
LIGHT AND POWER BOARD**

Minutes of Regular Meeting  
Held at 5:15 p.m., Commission Chambers, Governmental Center  
Tuesday, July 27, 2010

**BOARD MEMBERS -**

Present: Mike Coco, Linda Johnson, John Welch, John Snodgrass, John Taylor,  
Ralph Soffredine, Jim Carruthers

**EX OFFICIO MEMBER -**

Present: R. Ben Bifoss

**OTHERS:** Ed Rice, Tim Arends, Stephanie Tvardek, Nick Abraitis, Mark  
Rollenhagen, Glen Dine

The meeting was called to order at 5:16 p.m. by Chairman Coco.

**2. CONSENT CALENDAR**

Moved by Johnson, seconded by Soffredine, that the following items, as recommended on the Consent Calendar portion of the agenda, be approved:

- A. Consideration of approving minutes of the Regular Meeting of June 22, 2010.
- B. Consideration of approving minutes of the Human Resource Committee Meeting of June 30, 2010.
- C. Consideration of approving minutes of the Study Session of July 20, 2010.

CARRIED unanimously.

**3. OLD BUSINESS**

None

**4. NEW BUSINESS**

- A. Moved by Carruthers, seconded by Soffredine, that in the best interest of Light and Power, the Board authorize the issuance of a purchase order to Champion Charter Sales for the purchase of 200 LED overhead cobra head style fixtures, in the amount of \$126,400.00; and authorize the Executive Director to administer amendments and change orders that are in the best interests of the Light and Power Department.

Public Comment:

- Tom Karas, 8801 Section Line Road, Michigan Energy Alternatives Project,  
Non-Ratepayer

CARRIED unanimously.

- B. Moved by Soffredine, seconded by Welch, to offer a third letter of understanding to the Light and Power bargaining unit that calls for a 2% increase to the current wage rates with an effective date of July 4, 2010.

CARRIED unanimously.

- C. Moved by Welch, seconded by Johnson, that the Light and Power Board adopt a Net Metering Policy as presented to be effective immediately, subject to approval as to form by General Counsel.

Public Comment:

- Tom Karas, 8801 Section Line Road, Michigan Energy Alternatives Project, Non-Ratepayer
- Jim Barnes, 130 Hall Street, Eco-Building Products, Ratepayer
- Jeff Stratten, 2360 W. Carriage Hill Drive, J.D. Stratten Electric, Non-Ratepayer

CARRIED unanimously.

- D. Moved by Welch, seconded by Soffredine, that the Board authorize the Chairman and Secretary to execute an "Agreement between owner and architect" with AAI, with the architect's fee being a fixed fee of \$39,200 plus expenses, for architectural services for an addition to the Hastings Street Service Center; subject to approval as to substance by the Executive Director and as to form by General Counsel, and authorize the Executive Director to enter into change orders within his spending limit that are in the best interests of the utility.

Public Comment:

- Bob Sommerville, AAI, Traverse City

Roll Call:

- Yes – Soffredine, Taylor, Snodgrass, Welch, Johnson, Coco  
No – Carruthers

CARRIED.

## 5. REPORTS AND COMMUNICATIONS

### B. From Staff:

- (1) Ed Rice spoke re: the MPPA July meeting.
- (2) Ed Rice spoke re: the study session on Energy Optimization scheduled for August 3, 2010.
- (3) Ed Rice spoke re: the study session on Strategic Planning to be scheduled at a later date.
- (4) Ed Rice spoke in response to public comment from the July 21, 2010 study session re: MACTEC's findings. Ed clarified MACTEC did state there was no discernable difference between Biomass and Natural Gas emissions.
- (5) Ed Rice spoke in response to public comment from the July 21, 2010 study session re: the price of solar.

### C. From Board:

- (1) Commissioner Carruthers spoke re: the June 21, 2010 Vanity Fair article "A Colossal Fracking Mess".

- (2) Commissioner Carruthers spoke re: the movie "Gasland" which will be played during the Traverse City Film Festival this Saturday, July 31, 2010 at 3pm at the Opera House.
- (3) John Welch spoke re: Light and Power year end financials.
- (4) John Welch spoke re: re-energizing the Wi-Fi discussions.
- (5) John Welch spoke re: Bayfront Planning Projects discussed at Rotary.

**6. PUBLIC COMMENT**

- Tom Karas, 8801 Section Line Road, Michigan Energy Alternatives Project, Non-Ratepayer

The meeting adjourned at 7:06 p.m.

/st

---

Edward E. Rice, Secretary  
LIGHT AND POWER BOARD

**TRAVERSE CITY  
LIGHT AND POWER BOARD**

Minutes of Light and Power Board Study Session  
Held at 5:15 p.m., Light and Power Service Center  
Tuesday, August 3, 2010

**LIGHT AND POWER BOARD MEMBERS -**

Present: Mike Coco, Linda Johnson, John Welch, John Snodgrass, John Taylor, Ralph Soffredine, Jim Carruthers

**EX OFFICIO MEMBER -**

Present: R. Ben Bifoss

**OTHERS:** Ed Rice, Tim Arends, Stephanie Tvardek, Jim Cooper, Jessica Wheaton, Karen Feahr, Glen Dine, Nick Abraitis

The meeting was called to order at 5:17 p.m. by Chairman Coco.

**1. Review of Light and Power's strategic plan.**

Board and staff reviewed and discussed possible revisions to the current strategic goals.

**2. Public Comment**

No one from the public commented.

Meeting adjourned at 7:21 p.m.

/st

---

Edward E. Rice, Secretary  
LIGHT AND POWER BOARD





TRAVERSE CITY  
LIGHT & POWER

---

**To:** Light & Power Board  
**From:** Ed Rice, Executive Director  
**Date:** August 6, 2010  
**Subject:** Renewable Energy Resolution

---

ER

At its April 20, 2010 meeting the Board passed a Resolution in Support of Renewable Energy Sources. While the Board may continue to support renewable energy sources, this particular resolution directed staff to pursue the development of local wood biomass generation opportunities.

Since that time, and through the strategic planning process, the Board has given staff the direction to not pursue biomass as a possible local generation source. Due to this change in direction it would be appropriate for the Board to formally rescind the prior resolution.

If you agree with Staff's recommendation that the Resolution of Support for Renewable Energy Sources be rescinded the following motion would be appropriate:

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

**THAT THE "RESOLUTION OF SUPPORT FOR RENEWABLE ENERGY SOURCES,"  
ADOPTED BY THE BOARD AT ITS APRIL 20, 2010 MEETING, BE RESCINDED.**



TRAVERSE CITY  
LIGHT & POWER

Investing Our Energy In You

**RESOLUTION OF SUPPORT  
FOR RENEWABLE ENERGY SOURCES**

**WHEREAS**, the Traverse City Light and Power Board has all the power and duties possessed by the City to...operate the light and power system and to do any and all acts or things that are necessary to operate, maintain...preserve or promote an orderly, economic and business-like administration of the Light and Power Department as it deems advisable pursuant to Traverse City Charter §176; and

**WHEREAS**, Traverse City Light & Power's vision is to enhance the local quality of life by securing our energy future; with a mission to be a customer-focused utility that provides reliable and competitively priced energy services that benefit the community; and

**WHEREAS**, the Traverse City Light and Power Board has established strategic goals that include: a) acquire diversified electric generation assets and achieve 30% of electric power requirements through renewable energy resources by 2020, as financially responsible; b) insulate customer rates from volatile power market prices; provide a high level of system reliability, including local generation; c) continue to serve as a leader in sustainable energy strategies and energy conservation; and support economic development in the community; and

**WHEREAS**, the Traverse City Light & Power Board supports renewable energy sources for this utility that includes wind, solar, biomass, and landfill gas; and will continue to promote energy conservation efforts for all of its customers; and

**WHEREAS**, the Board believes that wood biomass generation is the most cost effective local renewable baseload generation option for the utility; that it has sustainable fuel sources to support its long-term operations without harming Michigan's forests; and that it has lower emissions than fossil fuel generation options,

**NOW, THEREFORE, BE IT RESOLVED that the Board of Traverse City Light and Power directs its staff to pursue the development of local wood biomass generation opportunities for the benefit of the utility's ratepayers.**

I, Edward E. Rice, Secretary of the Light and Power Board of the City of Traverse City, do hereby certify that the foregoing resolution was duly passed and adopted by the Light and Power Board at a Special Meeting thereof assembled this 20<sup>th</sup> day of April, 2010, by the following vote: 4 Yes and 2 No.

*Edward E. Rice*

Edward E. Rice, Executive Director & Secretary  
Traverse City Light and Power Board

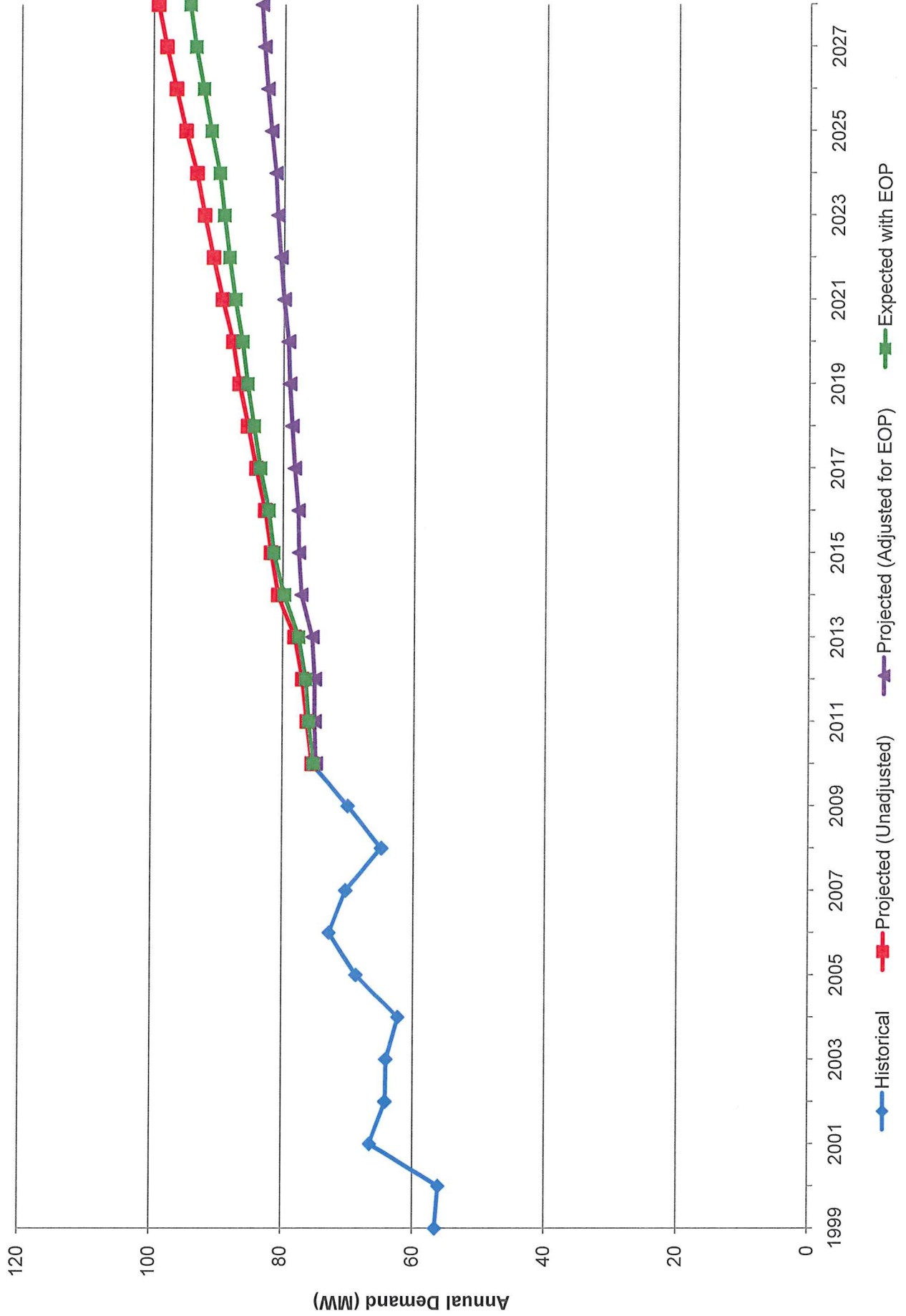
# Energy Optimization Presentation

Traverse City Light & Power  
Board Meeting  
August 10, 2010

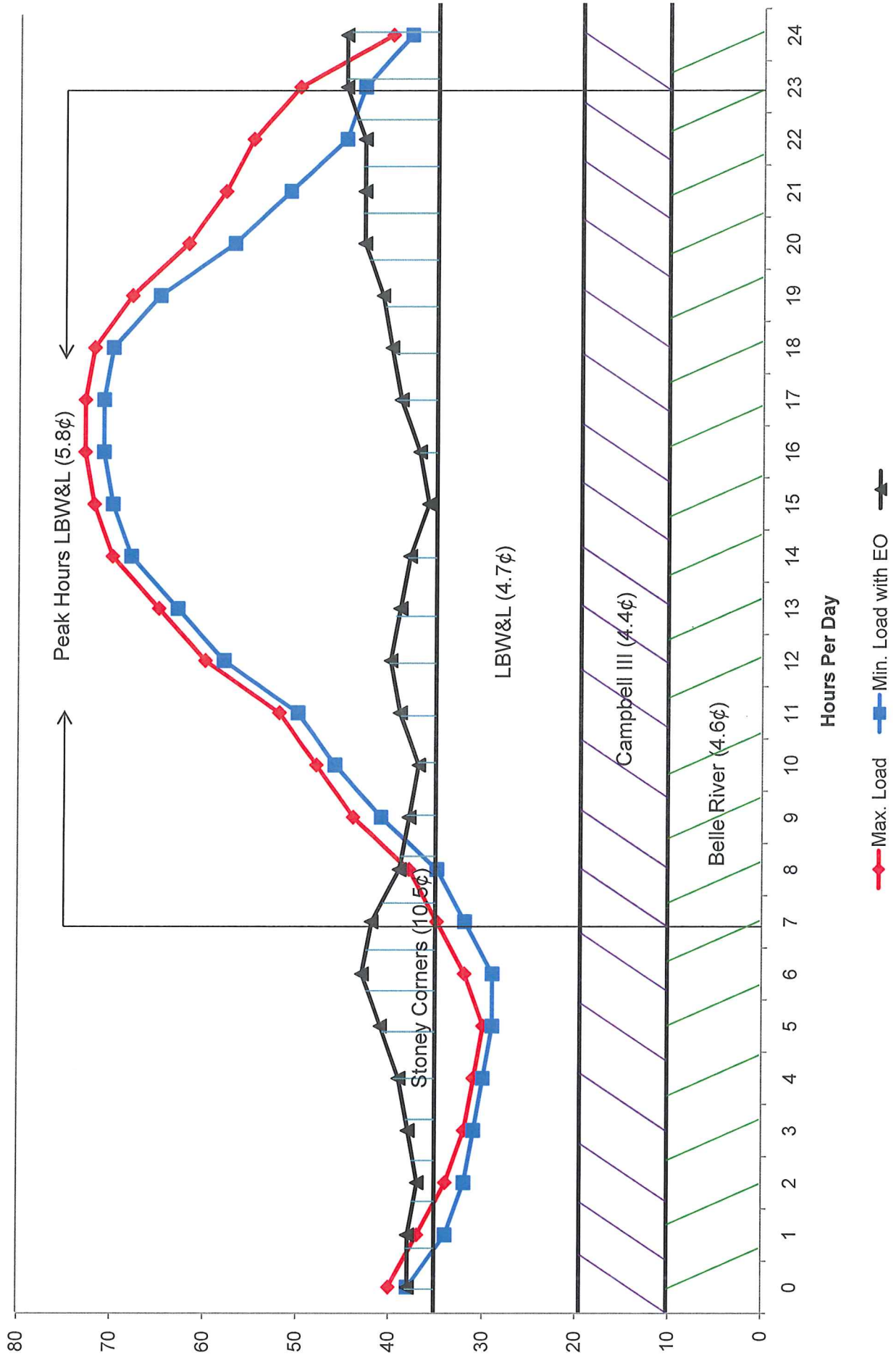
## Discussion Items

- Energy Optimization Impact on Peak Load
  - Energy Use Reduction vs. Peak Load Reduction
- Electric Supply Planning
  - Load Curves
  - Load Following vs. Block Purchases
  - Daily Off Peak Wind Project Impacts
  - Daily Off Peak Energy Optimization Impacts
- TCL&P Customer Demand Mix
  - Reduce Peak through E.O.

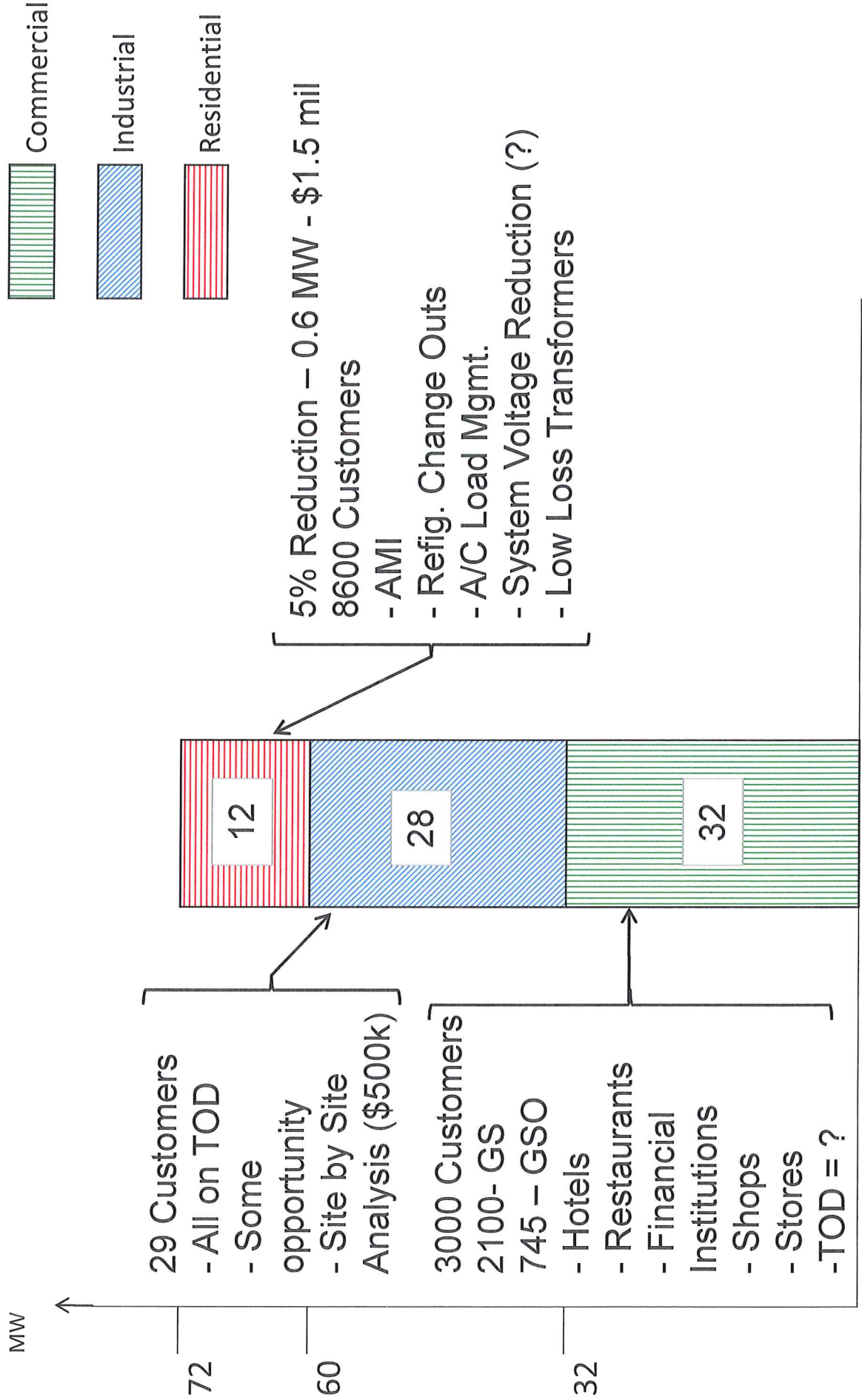
# Peak Demand Forecast – Unadjusted v. Adjusted for EOP



# Traverse City Light & Power - 24 Hour Load Curves



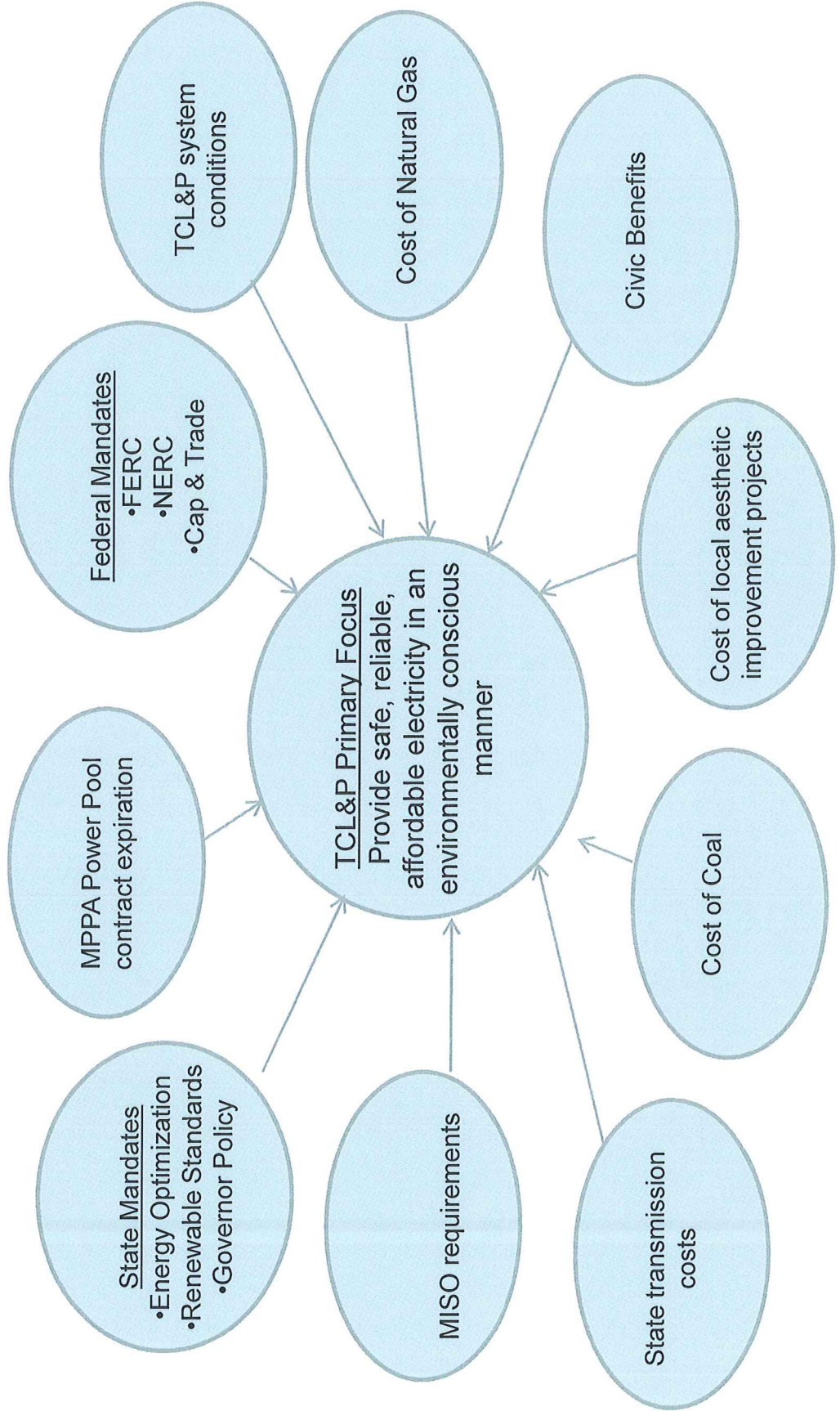
# Traverse City Light & Power – Customer Demand Mix







## Traverse City Light & Power's Rate Pressures





**Traverse City Light and Power Optimization Plan  
MPSC Case No. U-15884**

**SECTION 1: PA 295 SECTION 71 SUBSECTION 3 REQUIRMENTS**

***Section 71 (3) (a) The EO plan shall offer programs to each customer class including low income customers;***

The table below shows the incremental savings in megawatt hours required for TCLP Energy Optimization programs.

<i>Savings is reported in Megawatt hours</i>			
<b>Program Year</b>	<b>% Saving</b>	<b>Sales Year</b>	<b>Total Savings Required</b>
2008-2009	0.30%	2007	991
2010	0.50%	2009	1,631
2011	0.75%	2010	2,428
2012	1.0%	2011	3,242

TCLP Energy Optimization programs were developed to serve all customer classes including residential low income. TCLP's 2009 plan is based on allocating approximately 4% of its EO budget to low income program, 25% to residential, 59% to commercial and industrial, and 12% to education, evaluation and administration. Program allocations will be revised on an annual basis in order to continue meeting the goals under PA 295.



**Section 71 (3)(b)** *The EO plan shall specify the necessary funding levels;* In order to achieve the mandatory energy savings targets, TCLP's Energy Optimization Plan will require the maximum spending as allowed in Section 89 (7) of Public Act 295. The estimated funding levels are shown in the table below.

<i>Expenditures Percentage of Retail Sales</i>			<b>Total Spending \$</b>
<b>Program Year</b>	<b>% Spending</b>	<b>Sales Year</b>	
2009	0.75%	2007	\$89,484
2010	1.00%	2008	\$222,618
2011	1.50%	2009	\$391,094
2012	2.0%	2010	\$526,568

# Traverse City's Energy Optimization Program Portfolio Table 1

		2009		2010		
Portfolio Category	Program Portfolio	Gross First Year kWh Savings	Program Budget	Gross First Year kWh Savings	Program Budget	
<b>Residential</b>	Low Income Services	5,508	\$ 3,580	13,692	\$ 8,900	
	CFLs - State Grant	264,600	\$ -	264,600	\$ -	
	Efficient Lighting	2,121	\$ 1,061	3,182	\$ 1,591	
	Refrigerator/Freezer Turn-In & Recycling	67,584	\$ 9,246	135,168	\$ 19,163	
	Efficient Appliances/Electronics	-	\$ -	6,330	\$ 2,962	
	Efficient HVAC Equipment	-	\$ -	3,682	\$ 2,768	
	Educational Services	14,858	\$ 1,343	24,454	\$ 3,338	
	Pilot/Emerging Technology Programs	-	\$ -	16,303	\$ 2,225	
	<b>Subtotal - Residential Solutions</b>		<b>354,671</b>	<b>\$ 15,229</b>	<b>467,410</b>	<b>\$ 40,947</b>
	<b>Commercial &amp; Industrial</b>	Prescriptive Incentive Program	423,799	\$ 58,184	844,338	\$ 116,040
Custom Incentive Program		46,347	\$ 6,674	278,081	\$ 40,044	
Educational Services		14,858	\$ 1,343	24,454	\$ 3,338	
Pilot/Emerging Technology Programs		-	\$ -	16,303	\$ 2,225	
2008 Program Savings		151,065	\$ -	-	\$ -	
<b>Subtotal - Business Solutions</b>			<b>636,069</b>	<b>\$ 66,200</b>	<b>1,163,175</b>	<b>\$ 161,646</b>
	<b>Total Program Portfolio</b>	<b>990,740</b>	<b>\$ 81,429</b>	<b>1,630,585</b>	<b>\$ 202,593</b>	
<b>Portfolio-Level Costs</b>	Utility Program Administration		\$ 4,475		\$ 11,125	
	Evaluation (EM&V)		\$ 3,580		\$ 8,900	
	<b>Subtotal - Utility Admin/Evaluation</b>		<b>\$ 8,055</b>		<b>\$ 20,025</b>	
	<b>Projected Annual Totals</b>	<b>990,740</b>	<b>\$ 89,484</b>	<b>1,630,585</b>	<b>\$ 222,618</b>	



# Traverse City's Energy Optimization Program Portfolio Table 1

		2011		2012		
Portfolio Category	Program Portfolio	Gross First Year kWh Savings	Program Budget	Gross First Year kWh Savings	Program Budget	
<b>Residential</b>	Low Income Services	24,062 \$	15,640	32,400 \$	21,060	
	CFEs - State Grant	-	-	-	-	
	Efficient Lighting	203,389 \$	19,800	305,084 \$	29,700	
	Refrigerator/Freezer Turn-In & Recycling	202,752 \$	31,931	304,128 \$	49,520	
	Efficient Appliances/Electronics	9,494 \$	4,828	14,241 \$	7,331	
	Efficient HVAC Equipment	5,523 \$	4,455	8,285 \$	6,683	
	Educational Services	36,392 \$	5,865	48,613 \$	7,898	
	Pilot/Emerging Technology Programs	48,523 \$	7,820	81,022 \$	13,163	
	<b>Subtotal - Residential Solutions</b>		<b>530,135 \$</b>	<b>90,339</b>	<b>793,773 \$</b>	<b>135,353</b>
	<b>Commercial &amp; Industrial</b>	Prescriptive Incentive Program	1,395,691 \$	191,815	1,692,973 \$	232,671
Custom Incentive Program		417,121 \$	60,065	625,682 \$	90,098	
Educational Services		36,392 \$	5,865	48,613 \$	7,898	
Pilot/Emerging Technology Programs		48,523 \$	7,820	81,022 \$	13,163	
2008 Program Savings						
<b>Subtotal - Business Solutions</b>			<b>1,897,727 \$</b>	<b>265,565</b>	<b>2,448,290 \$</b>	<b>343,829</b>
	<b>Total Program Portfolio</b>	<b>2,427,861 \$</b>	<b>355,904</b>	<b>3,242,063 \$</b>	<b>479,183</b>	
<b>Portfolio-Level Costs</b>	Utility Program Administration	\$	19,550	\$	26,325	
	Evaluation (EM&V)	\$	15,640	\$	21,060	
	<b>Subtotal - Utility Admin/Evaluation</b>	\$	<b>35,190</b>	\$	<b>47,385</b>	
	<b>Projected Annual Totals</b>	<b>2,427,861 \$</b>	<b>391,094</b>	<b>3,242,063 \$</b>	<b>526,568</b>	

**Traverse City's Proposed Energy Optimization Programs – Table 2  
Residential Programs**

<b>Program Element</b>	<b>Residential Refrigerator/Freezer Turn-In and Recycling Program</b>									
<b>Eligible Measures</b>	<p>The measures listed below have been specified for planning purposes. Deemed savings values were based on documented values from the Michigan Statewide Deemed Savings Database (as identified by MPSC Order U-15800.) The utility will revise eligible measures as needed in accordance with current market conditions, technology development, EM&amp;V results, and program implementation experience.</p> <table border="1" data-bbox="1055 136 1385 1570"> <thead> <tr> <th data-bbox="1055 136 1185 630"><b>Measure</b></th> <th data-bbox="1055 630 1185 1365"><b>Eligibility</b></th> <th data-bbox="1055 1365 1185 1791"><b>Gross Annual kWh Savings/Unit</b></th> </tr> </thead> <tbody> <tr> <td data-bbox="1185 136 1266 630">Recycled Refrigerator</td> <td data-bbox="1185 630 1266 1365">Operable unit</td> <td data-bbox="1185 1365 1266 1791">1,672</td> </tr> <tr> <td data-bbox="1266 136 1385 630">Recycled Freezer</td> <td data-bbox="1266 630 1385 1365">Operable unit</td> <td data-bbox="1266 1365 1385 1791">1,551</td> </tr> </tbody> </table>	<b>Measure</b>	<b>Eligibility</b>	<b>Gross Annual kWh Savings/Unit</b>	Recycled Refrigerator	Operable unit	1,672	Recycled Freezer	Operable unit	1,551
<b>Measure</b>	<b>Eligibility</b>	<b>Gross Annual kWh Savings/Unit</b>								
Recycled Refrigerator	Operable unit	1,672								
Recycled Freezer	Operable unit	1,551								



Traverse City's Proposed Energy Optimization Programs – Table 2  
Residential Programs

Program Element	Residential Refrigerator/Freezer Turn-In and Recycling Program		
Estimated Participation	Participation (in Units of Installed Measures)		
	2009	2010	2011
	41	82	123
Estimated Budget	Annual Budgets		
	2009	2010	2011
	\$9,246	\$19,163	\$31,931
Savings Targets	Energy Savings (Gross Annual kWh)		
	2009	2010	2011
	67,584	135,168	202,752
			2012
			185
			\$49,520
			304,128



## Residential Application For High Efficiency HVAC Systems And Energy Star® Dehumidifiers

**Central Air Conditioning, Furnace Upgrade and ENERGY STAR® Qualified Appliances**  
 For Central Air Conditioning the indoor coil and outdoor condenser must be a matched set to be eligible and installed on the same date.

Description	Efficiency Requirements	Quantity	Incentive Per Unit	Total Incentive (Quantity x incentive)
Central AC	14 SEER		\$75.00	
Central AC	15 SEER		\$125.00	
Central AC	16 SEER		\$150.00	
Furnace with ECM Motor	ECM Motor Equipped		\$100.00	
ENERGY STAR® Room/Window AC Unit	ENERGY STAR® Qualified		\$15.00	
ENERGY STAR® dehumidifier purchase	ENERGY STAR® Qualified		\$15.00	
<b>TOTAL INCENTIVE:</b>				