# A REGULAR MEETING

Of The

# TRAVERSE CITY LIGHT AND POWER BOARD

Will Be Held On

TUESDAY, June 14, 2011

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: 6-10-11

4:00 p.m.

# **AGENDA**

2

# Pledge of Allegiance

# 1. Roll Call

Introduction of Tom Olney, Operations Manager. (Rice)

# 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 Special Meeting and Closed Session of May 3, Study Session of May 5 and the Regular Meeting of May 10, 2011.
- b. Consideration of approving the 2011-12 Insurance Renewal. (Arends)

### 3. Old Business

a. 2011-2012 Operating Budget. (Rice)

# 4. New Business

a. Consideration of approving a Rate Stabilization Resolution. (Rice)

# 5. Appointments

None.

# 6. Reports and Communications

- a. From Legal Counsel.
- b. From Staff.
  - 1. Update re: Renewable Energy Plan filing. (Feahr)
- c. From Board.

# 7. Public Comment

# TRAVERSE CITY LIGHT AND POWER BOARD

Minutes of Light and Power Board Special Meeting Held at 5:15 p.m., Committee Room, Governmental Center Tuesday, May 3, 2011

### LIGHT AND POWER BOARD MEMBERS -

Present:

Jim Carruthers, Michael Estes, Ralph Soffredine, John Taylor,

Linda Johnson, Mike Coco

Absent:

John Snodgrass

### **EX OFFICIO MEMBER -**

Present:

Ben Bifoss, City Manager

**OTHERS:** 

Ed Rice, Tim Arends, Stephanie Tvardek, Jim Cooper, Glen Dine,

Karen Feahr

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

# 1. Consideration of entering into closed session to discuss system operations.

Moved by Johnson, seconded by Soffredine, that the Traverse City Light & Power Board go into closed session immediately after Public Comment to discuss system operations.

CARRIED unanimously. (Snodgrass absent)

# 2. Public Comment

No one from the public commented.

Meeting adjourned at 5:25 p.m.

	Edward E. Rice, Secretary	
/st	LIGHT AND POWER BOARD	

# TRAVERSE CITY LIGHT AND POWER BOARD

Minutes of Light and Power Board Study Session Held at 5:30 p.m., Light & Power Service Center Thursday, May 5, 2011

### LIGHT AND POWER BOARD MEMBERS -

Present: Michael Estes, John Snodgrass (arrived 5:35 p.m.), Ralph Soffredine, John Taylor, Linda

Johnson, Mike Coco

Absent: Jim Carruthers

### **EX OFFICIO MEMBER -**

Absent: Ben Bifoss, City Manager

OTHERS: Ed Rice, Tim Arends, Stephanie Tvardek, Jim Cooper, Glen Dine, Karen Feahr

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

Member Snodgrass arrived at 5:35 p.m.

# 1. Discussion of the major Capital Improvement Plan projects.

Staff presented a 10 year history of Capital Improvements as requested by the Board. It was the Board consensus to defer that conversation to a future regular meeting. After further discussion, the Board decided to not review the current Capital Improvement Plan in detail. There was general discussion regarding local generation.

# 2. Board revenue and expense discussion.

The Board discussed the increased cost of generation and its impact on customers through the cost of the Power Cost Recovery; and further discussed options of leveraging the utility's fund balance to off-set those impacts. Staff requested each Board Member submit their plan for accomplishing this off-set; staff will present the various options and its financial impact at a future Board meeting.

### 3. Public Comment

No one from the public commented.

Meeting adjourned at 8:01 p.m.

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, May 10, 2011

### **Board Members -**

Present:

Jim Carruthers, John Snodgrass, Ralph Soffredine, John Taylor, Linda

Johnson (arrived 5:53 p.m.), Mike Coco

Absent:

Michael Estes

### Ex Officio Member -

Present:

R. Ben Bifoss

Others:

Ed Rice, Tim Arends, Stephanie Tvardek, Jim Cooper, Jessica Wheaton

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

# Item 2 on the Agenda being Consent Calendar

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

a. Minutes of the Regular Meeting and Closed Session of April 26, 2011 be approved.

CARRIED unanimously. (Estes, Johnson absent)

Moved by Taylor, seconded by Snodgrass, that a staff report regarding the Bay Street Undergrounding Project be added to the agenda under Reports and Communications item 6(b)5 as recommended by Chairman Coco.

CARRIED unanimously. (Estes, Johnson absent)

### Item 3 on the Agenda being Old Business

None.

# Item 4 on the Agenda being New Business

None.

# Item 5 on the Agenda being Appointments

a. Consideration of appointment of an Ad Hoc Committee for the annual Executive Director Review.

Chairman Coco appointed himself, Member Johnson and Member Taylor to the Ad Hoc Committee for the annual Executive Director Review with the consensus of the Board.

# Item 5 on the Agenda being Reports and Communications

A. From Legal Counsel.

None.

- B. From Staff.
  - 1. Jim Cooper spoke re: the 2010 Annual Report for Public Act 295.

Vice Chair Johnson arrived at 5:53 p.m.

- 2. Ed Rice spoke re: the piece on Power Cost Recovery in the next monthly bill insert.
- 3. Ed Rice gave a verbal update re: the South Substation real property purchase option.
- 4. Ed Rice spoke re: the 10 year history of Capital Expenditures.
- 5. Ed Rice gave a verbal update re: the Bay Street Undergrounding Project.
- C. From Board.
  - 1. John Taylor announced he would be speaking at the NMEAC Board Meeting scheduled for tonight re: the importance of communication and marketing to a utility company as it relates to energy efficiency.

# Item 6 on the Agenda being Public Comment

No one from the public commented.

There being no objection, Chairman Coco declared the meeting adjourned at 6:23 p.m.

Edward E. Rice, Secretary LIGHT AND POWER BOARD

/st



To:

**Light and Power Board** 

From:

Tim Arends, Controller

Date:

June 9, 2011

Subject:

2011-12 Insurance Renewal

The Michigan Municipal League (MML) has submitted its proposal for liability and property insurance for fiscal year 2011-12 in the amount of \$61,214. Attached is an Executive Overview from MML describing their company, the insurance process, and a list of benefits of pooling with MML.

The insurance cost for L&P has decreased over each of the past five years.

2007-08 - \$120,698

2008-09 - \$102,605

2009-10 - \$ 75,564

2010-11 - \$ 69,781

2011-12 - \$ 61,214

As reported by MML, the main reason for the decrease is that Light & Power and the City are benefiting from a lower experience factor due to its favorable claim history.

This item is on the consent calendar as it is deemed non-controversial. Staff recommends that the Board accept this proposal and authorize payment to MML for the 2011-12 property & liability insurance premium. Approval of this item on the consent calendar means you agree with staff's recommendation.

If removed from the consent calendar it should be placed as a New Business item. If after Board discussion you agree with staff's recommendation the following motion would be appropriate:

<b>MOVED BY</b>		<b>SECONDED BY</b>	
	The state of the s		

THAT THE LIGHT AND POWER BOARD APPROVE PAYMENT TO THE MICHIGAN MUNICIPAL LEAGUE LIABILITY AND PROPERTY POOL IN THE AMOUNT OF \$61,214 FOR FISCAL YEAR 2011-12 LIABILITY AND PROPERTY INSURANCE.



May 20, 2011

Mr. Timothy Arends, Controller **Traverse City Light & Power** 

Re: Light and Power Renewal Premium for 2011-2012.

Your renewal premium represents a decrease of approximately 12.27%. Below is your premium breakdown by Line of Insurance Coverage.

Over all, Light & Power's premium decreased \$8,567 due to the Pool rates being reduced for the City of Traverse City and Traverse City Light & Power.

Line of Coverage	2010/2011	2011/2012	2010/2011	2011/2012
	Premium	Premium	Deductible	Deductible
General Liability	\$8,508	\$8,977	\$0	\$0
Errors & Omissions	\$27,988	\$19,843	\$0	\$0
Property	\$20,487	\$19,795	\$5,000	\$5,000
Inland Marine – Mobile Station	\$316	\$301	\$1,000	\$1,000
Excess Liability 1 mm x 1 mm	\$6,155	\$5,932	N/A	N/A
Excess Liability 3 mm x 2 mm	\$6,327	\$6,366		
Total	\$69,781	\$61,214		

The Michigan Municipal League Liability and Property Pool appreciates your 26 years of membership and we are committed to providing you with the best comprehensive coverage and service.

Sincerely,

Connie M. Monson

MML Account Executive

www.mml.org



# Liability & Property Pool

Proposal

For

The

City of Traverse City

Presented By:

Connie M. Monson Meadowbrook® Insurance Group, Service Provider 877-370-8892

May 20, 2011

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This proposal is intended to be only a summary of coverages and services. For specific details on coverage terms and conditions, please refer to the Michigan Municipal League Liability and Property Pool coverage document.

# **Executive Overview**

The Michigan Municipal League Liability and Property Pool is administered by the Risk Management staff of the Michigan Municipal League, and serviced by Meadowbrook Insurance Group. Since 1982, the Pool has been a stable source of comprehensive municipal insurance and risk management services. It is financially secure and positioned for long-term stability.

The City of Traverse City has been a Pool member since July 1, 1985.

The League administrative staff and the dedicated Pool staff at Meadowbrook Insurance Group are municipal insurance experts. Municipal risk management is our only business, and we're proud of it!

The Pool provides insurance coverage designed specifically for Michigan municipal exposures, combined with a package of loss control programs, claims administration, legal defense and membership services that you won't find anywhere else in Michigan.

This quotation is based on the limits of coverage requested by the **City of Traverse City.** Higher limits may be available, subject to underwriting review by Pool Management. Please submit requests for higher limits in writing to your Account Executive. Your request will be considered by Pool Management.

The insurance and related services described more fully in this proposal are being offered to the City of Traverse City for an annual premium of \$333,060.

Traverse City Light & Power for an annual premium of \$61,214.

Total combined annual premium \$394,274.

\* OPTIONAL QUOTE: Sewer & Drain Backup Liability \$34,401 additional premium for \$100,000 annual aggregate sublimit.

We encourage you to compare the Pool with our competition. Compare us based on price, coverage, service, financial security, experience and commitment to municipal risk management. When you do, the advantages of Pool membership become clear.

Thank you for being a Pool member. We look forward to servicing your risk management program for many years to come.

# **Our Mission**

To be a long-term, stable, cost-effective risk management alternative for members of the Michigan Municipal League Liability and Property Pool.

# Introduction

# What You Can Expect Of Us

- ✓ A commitment to learn, understand and respond to your insurance needs;
- Continuous planning and innovation in product development and service delivery;
- ✓ Products that meet your needs in terms of price, coverage and service;
- ✓ Prompt, accurate, and courteous response to your questions, problems and claims; and
- ✓ Knowledgeable and professional staff serving your needs consistently and with integrity.

# Your Pool Insures More Than . . .

- √ 400 Public Entity Members
- ✓ 17,685 Employees
- √ 2,550 Elected Officials
- √ 110 Fire Departments
- √ 7,200 Vehicles
- √ 200 Water Service Operations

- √ 197 Law Enforcement Agencies
- ✓ 22 Electric Utilities
- √ 26 Municipal Marinas
- √ 4,340 Miles of Streets/Roads
- √ \$3.1 Billion of Property Values
- √ 175 Sewer Operations

# Coverage and Cost Summary City Of Traverse City

Effective 07-01-2011 to 07-01-2012

Coverages	Limit of Liability	Aggregate Limit	Per Occurrence Deductible
Municipal General Liability (Coverage A)	\$5,000,000	N/A	\$0
Sewer Back-Up Sublimit	No Coverage	N/A	N/A
Personal Injury Liability (Coverage B)	\$5,000,000	N/A	\$0
Medical Payments (Coverage C)	\$10,000	N/A	N/A
Public Officials Liability (Coverage D)	\$5,000,000	N/A	\$0
Law Enforcement Liability (Coverages A, B, and D)	\$5,000,000	N/A	\$0
Employee Benefit Liability	\$1,000,000	\$1,000,000	\$0
Fire Legal Liability	\$100,000	N/A	N/A
Dam Liability	No Coverage	N/A	N/A
Marina Operator Liability	No Coverage	N/A	N/A
Additional Interest	\$5,000,000	N/A	\$0
Automobile Liability (Coverages A and B)	\$5,000,000	N/A	\$0
# Vehicles Comp Coll			
133 \$500 \$1,000			
Agreed Amount, if applicable 5 Vehicles for a total of \$2,555,693			

Coverages A, B, and D are provided with a combined single limit of liability. The most the Pool will pay for any one occurrence is \$5,000,000 regardless of the number of coverages involved in the occurrence.

Property - Blanket Basis	\$132,168,180	N/A	\$5,000
Boiler and Machinery	Included	N/A	\$5,000
Building(s)	Included	N/A	\$5,000
Contents	Included	N/A	\$5,000
Property in the Open	Included	N/A	\$5,000
Protection & Preservation	Included	N/A	N/A
Property - Limited Replacement Cost, if applicable	\$0	N/A	\$0
Accounts Receivable	\$100,000	N/A	\$1,000
Channel 99 television broadcasting equipment	\$44,340	N/A	\$1,000
Commission Chambers presentation equipment	\$16,968	N/A	\$1,000
Consequential Damage	\$100,000	N/A	N/A
Contractor's Equipment	\$3,100,000	N/A	\$1,000
Debris Removal - the lesser of 25% of physical damage loss or	\$5,000,000	\$5,000,000	N/A
Demolition & Increased Costs of Construction Limit	\$100,000	N/A	N/A
Earthquake	\$2,000,000	\$2,000,000	\$5,000

# Coverage and Cost Summary City Of Traverse City

Effective 07-01-2011 to 07-01-2012

Coverages	Limit of Liability	Aggregate Limit	Per Occurrence Deductible
Electronic Data Processing Equip	\$557,916	N/A	\$1,000
Expediting Expense	\$100,000	N/A	N/A
Extra Expense	\$400,000	N/A	N/A
Fine Arts	\$1,050,000	N/A	\$1,000
Fire Equipment	\$1,632,000	N/A	\$1,000
Flood (Except for Members located in Flood Zone A, AO, AH, A1-A999, AE, or AR)	\$1,000,000	\$1,000,000	\$5,000
Loss of Income	\$100,000	N/A	N/A
Loss of Rents	\$100,000	N/A	N/A
Mobile Station (Light & Power)	\$375,708	N/A	\$1,000
Ornamental Trees, Shrubs, Plants or Lawn	\$5,000	\$10,000	\$1,000
Personal Effects & Property of Others	\$500	\$2,500	\$1,000
Valuable Papers	\$125,000	N/A	\$1,000
Voting Equipment	\$119,885	N/A	\$1,000
Zoo Train Floater	\$110,408	N/A	\$1,000
Comprehensive Crime Coverage			
Employee Dishonesty Blanket/Faithful Performance	\$100,000	N/A	N/A
Depositors Forgery	\$100,000	N/A	N/A
Money and Securities Inside	\$100,000	N/A	N/A
Money and Securities Outside	\$100,000	N/A	N/A
Money Orders and Counterfeit Paper	\$100,000	N/A	N/A
<u>Bonds</u>			
Bond #: A Treasurer	\$250,000	N/A	N/A
Bond #: B Deputy Treasurer	\$100,000	N/A	N/A
Bond #: C Cashier Clerk #1	\$100,000	N/A	N/A
Bond #: D Cashier Clerk #2	\$100,000	N/A	N/A

Only one deductible applies to claims involving two or more property coverages.

The Michigan Municipal League Liability and Property Pool is pleased to offer all coverages and services described in this proposal for an annual premium of \$394,274.

# Your Team of Experts



Connie Monson Municipal Account Executive 231-276-6499



Michael J. Forster Pool Administrator (734) 669-6340



Ellen Skender 248-204-8582



Joan Opett 248-204-8579

# **Customer Service Representatives**



Tom Weed Claims Supervisor (616) 942-0311, ext. 4123



Rod Pearson Loss Control Supervisor (248) 204-8036

# Benefits of Pooling with the MML

- ✓ Proven long-term availability and stability
- ✓ Broad coverage document written specifically for Michigan municipalities
- ✓ Services tailored to unique needs of Michigan municipalities
- ✓ Member assets controlled by an elected Board of municipal officials
- ✓ Equitable rating based on Pool experience in Michigan
- √ Aggressive defense strategy positive impact on case law
- ✓ Professional, dedicated, and experienced local management, oversight and service
- ✓ Decisions made and problems resolved by a group of your peers
- ✓ Investment income and underwriting surplus used to benefit members
- ✓ Lower expenses through tax-exempt and non-profit status
- Special loss avoidance training sessions including:
  - √ Safety aspects of emergency vehicle operations
  - ✓ Accident investigation for supervisors
  - ✓ Confined spaces training

# The advantages of pooling can be summarized by:

Service + Control + Value

# The City of Traverse City Has . . .

- ✓ 132,168,180 total values for real and personal property (including TCLP)
- √ 30 Law Enforcement Officers
- √ 133 Vehicles
- √ 5 Fire/Rescue Vehicles with Agreed Values

# Increased Liability Limits

We cannot guarantee the adequacy of any limit of liability. Due to the following factors, it may be prudent to consider higher limits:

- ✓ Increased jury awards in your jurisdiction
- √ Increased litigation trends
- ✓ Protection of tax base against judgments in excess of your policy limits

# **Highlights of Coverages Provided**

# Who Is Insured?

The Pool member entity, elected and appointed officials, employees and authorized volunteers, and any person officially appointed to a Board or Commission

# **General Liability**

In addition to standard liability coverages (bodily injury, property damage, products and completed operations) the Pool provides coverages that municipalities need on an <u>occurrence basis with no</u> <u>aggregate liability limits</u>:

- ✓ Liability resulting from mutual aid agreements
- ✓ Premises medical payments
- ✓ Host liquor liability
- ✓ Fire legal liability for real property
- ✓ Watercraft liability, owned less than 26' and non-owned less than 50'
- ✓ Ambulance and EMT malpractice
- ✓ Special events excluding -
  - Fireworks
- Liquor Liability
- Mechanical Amusement Rides

- Athletic participation liability
- Employee benefit liability
- ✓ Cemetery operations coverage
- ✓ Pollution coverage for Hazardous Response Teams
- ✓ Marina Operators coverage available
- ✓ Up to \$10 million in liability limits available

# General Liability Exclusions . . .

The following is a partial list of general liability coverage exclusions. Consult the coverage document for the complete listing:

- ✓ Pollution (except for Hazmat operations).
- ✓ Contractual Liability
- ✓ Nuclear energy / nuclear material hazards
- √ Failure to supply utilities

✓ Aircraft Liability

Expected or intended injury

✓ Breach of contract

✓ Electromagnetic radiation

- √ Failure of dams
- ✓ Backup of Sewers and Drains (exception -- \$100,000 Annual Aggregate Sublimit for Sewer and Drain Liability)
- ✓ Criminal activity / Intentional acts with knowledge of wrongdoing
- Medical malpractice for doctors and physicians

# **Public Officials Liability Coverage**

"Wrongful Acts", including intentional acts, defined as any actual or alleged error, misstatement, act of omission, neglect or breach of duty including:

✓ Neglect of duty ✓ Discrimination

✓ Zoning defense and land use litigation ✓ Employment practices

√ Malfeasance
 √ Misfeasance

✓ Violation of civil rights ✓ Cable TV broadcasting

# **Public Officials Liability Exclusions**

The following is a partial list of public officials' liability coverage exclusions. Consult the coverage document for the complete listing:

✓ Pollution and Nuclear Energy ✓ Eminent domain / takings

✓ Fraud, dishonesty, intentional and criminal acts ✓ Illegal profit

✓ Failure to purchase coverage or adequate coverage ✓ Labor union actions

✓ Return of governmental grants or subsidies ✓ ERISA violations

✓ Intentional acts with knowledge of wrongdoing ✓ Backup of Sewers and Drains

# Personal Injury & Advertising / Broadcasters Liability Coverage

✓ Mental anguish and stress

✓ Libel, slander or defamation of character; violation of an individual's right of privacy

√ Proactive services for non-monetary damage claims

# **Police Professional Liability Coverage**

Police Professional Liability coverage is contained within the General Liability and Public Official Liability Coverage Parts

✓ Discrimination ✓ Assault or battery

√ False arrest, detention or imprisonment, or malicious prosecution

√ Wrongful entry or eviction or other invasion of the right of private occupancy

# **Property Coverage**

In addition to covering buildings, contents and personal property, the Pool provides:

- ✓ Blanket coverage -- All member-owned property insured (unless specifically excluded)
- ✓ Coverage based on ownership rather than on a "schedule on file" avoids coverage gaps due to errors or oversight
- ✓ Property of others in custody of the Member for which the Member has an obligation to provide coverage
- ✓ Boiler & Machinery coverage, including Boiler certification inspections
- Replacement Cost or Actual Cash Value available
- √ Fungal Pathogens (Mold) Limited Coverage
- ✓ Demolition/increased cost of construction
- √ No coinsurance
- √ Valuable papers
- ✓ Loss of Rents

- ✓ Property in the open
- ✓ Extra expense
- ✓ Expediting expense

# **Property Exclusions**

The following is a partial list of property coverage exclusions. Consult the coverage document for the complete listing:

- ✓ Nuclear reaction/ contamination
- ✓ War
- ✓ Cyber Risk
- ✓ Fungal Pathogens (Mold) excess of sub-limit
- ✓ Failure to supply utilities

- ✓ Transmission Lines and Poles
- ✓ Dishonest acts
- ✓ Acts of Terrorism
- ✓ Wear and tear
- ✓ Computer failures/ viruses

Only one deductible applies to claims involving two or more property coverages.

# **Comprehensive Crime Coverage**

- ✓ Employee Dishonesty/ Faithful Performance of Duty coverage provided on a blanket basis
- √ Loss Inside the Premises
- √ Loss Outside the Premises
- ✓ Money Orders/ Counterfeit Currency
- ✓ Depositors Forgery
- ✓ Up to \$500,000 limits available
- ✓ Peak Season, Obligee, Official Bond and Oath, Position Fidelity Bond endorsements available

# **Automobile Coverage Highlights**

### What Is Covered?

Coverage is afforded while operating land motor vehicles, trailers or semi-trailers designed for travel on public roads.

# **Auto Coverages Provided**

- ✓ Michigan No-Fault Coverage, includes mini-tort coverage for no extra charge
- ✓ Excess protection for use of personal automobile for municipal business
- ✓ Uninsured motorist for municipally owned vehicles
- ✓ Underinsured motorists
- ✓ Non-owned and hired auto
- ✓ Comprehensive actual cash value basis
- ✓ Collision actual cash value basis
- √ Volunteer firefighter auto accident liability coverage
- ✓ Agreed value coverage for emergency vehicles is available

# **Pool Risk Management Services**

- Review and service of all municipal insurance matters
- Public entity experts address various liability issues
- Aggressive, member-oriented defense strategy
- Former police officials address law enforcement risks

# Member Education

- Land use litigation awareness programs
- ✓ Sidewalk liability reduction programs
- Sexual harassment awareness training
- ✓ Hiring and employment practices
- Confined spaces entry training

- Physical inspection by municipal loss control engineers
- Training video library available to members
- Law enforcement risk control programs (LEAF and LERC)
- Property appraisal services available
- ✓ Barricading safety training
- ✓ Blood borne pathogens
- ✓ Liability issues for fire and EMS
- ✓ Occupational health concerns
- ✓ Back injury prevention

# **Online Services**

www.mml.org (click on the *Insurance* button) – offers Pool members an outstanding resource for municipal risk management information and self-help tools in one attractive, simple-to-navigate location. File a claim on line. Download your renewal application. Request a loss control service visit. E-mail us a question. Other services available online include:

- ✓ Publications, including Risk Management Newsletter
- ✓ Loss Control Tools, including: Tip Sheets (PERC\$) & Law Enforcement Newsletter
- ✓ MML Pool Financial Statements
- ✓ Board of Director action items
- ✓ General Policies
- ✓ Coverage Document
- Frequently Asked Questions
- Staff and Director Profiles

In order to access the *Members Only* section of the Pool website, you need a Password and User ID, which you can get by calling Jennifer Orr (MML staff) at (734) 669-6341

# **Membership Responsibilities**

Membership in the Michigan Municipal League Liability and Property Pool provides numerous benefits. Likewise, individual members have certain responsibilities to the other members, which are detailed in the Intergovernmental Contract. The following is a summary of the membership responsibilities. Please refer to the Intergovernmental Contract, Articles 5 and 6, for more information.

- If a Member intends to leave the Pool, the Member must send a written notice to the Pool at least 60 days prior to its next renewal date.
- A Member must pay its premium when due. The Pool must give each member 20 days written notice of intent to terminate membership for nonpayment of premium. Payment of premium before the 20 days notice is effective will entitle the Member to reinstatement.
- Members must maintain membership or associate membership status in the Michigan Municipal League.
- A Member will allow attorneys employed by the Pool to represent the Member in defense of any claim made against the Member within the scope of coverage provided by the Pool. A Member will cooperate with the assigned attorneys, claims adjusters, service company or other agents of the Pool relating to the defense of claims for which the Pool is providing coverage.
- A Member will follow loss reduction and prevention measures established by the Pool.
- ✓ A Member will report to the Pool as promptly as possible all incidents that the Member reasonably believes may result in a claim against the Member.

# Your Peers are Members

"Thank you for the time that you spent helping Grand Rapids Township with insurance issues in the past several years. It has been so easy to work with you and the other offices of the League. I look forward to working with you again. Thanks."

Janice K. Hulbert, Clerk
Grand Rapids Charter Township

"I enjoy the relationship I have with you and the individuals that serve us and appreciate the education in risk management that you all continue to offer. I am a better manager with the MML Liability & Property Pool as part of my team..."

Denise M. Parisian, Village Manager Village of Dimondale

"...We have been a member of both programs (the Liability & Property Pool and the Workers' Compensation Fund) for a number of years and have always enjoyed excellent services and coverage.

Because of the poor economic conditions, we felt that it was necessary to at least look at alternative insurance products. After careful review, I found that the Pool and Fund products were superior, many times exceeding coverage provided by other traditional carriers. It would be easy to decide to be insured with a lower cost alternative. However, in the end, the cost of claims handling and uninsured coverage would far exceed any short-term savings.

...we have always received very quality services."

Kevin M. Welch, City Manager City of Tecumseh

"On behalf of the City of Ionia, I would like to thank you and the Pool for continuing to provide the City, and all Pool members, with quality insurance and risk management services. The City continues to be a proud member and subscriber of the Pool's services and programs.

During the course of my municipal career I have had the opportunity to be exposed to a full range of the services that the Pool offers. I have also been involved in major losses and found that the Pool was prompt and fair in responding to the community's needs.

... Again, thank you for the quality services that you and the Pool provide."

Jason Eppler, City Manager City of Ionia



To:

Light and Power Board

From:

Light and Power Board
Ed Rice, Executive Director

Date:

June 9, 2011

Subject:

2011-12 Operating Budget

As you are aware by now, the City Commission failed to approve the Light & Power budget at its meeting of June 6, 2011 due to specific concerns. While the Commission does not have individual line item authority over the Light & Power budget they did exercise their authority to not approve the budget in its entirety.

Because it is required by City Charter that Light & Power have a budget approved by the city commission; and because Light & Power is barred from expending any funds except as in conformity with an approved budget, it is imperative that a budget be adopted by the City Commission before July 1st.

Based on the feedback of individual Commissioner's during the City Commission Meeting regarding the Light & Power budget I recommend not adding the additional staff positions for Community Relations and Energy Optimization as originally intended. I believe that elimination of these two staff positions will be required to gain support of the City Commission for the 2011-12 Light & Power operating budget.

FY 09/10

Actual

FY 10/11

Budgeted

FY 10/11

Projected

FY 11/12

Recommended

OPERATING REVENUES: State Grants	\$	21,176	\$	15,000	\$	27,650	\$	
Residential Sales	Þ	4,799,781	Ф	5,212,000	Ф	5,720,000	Ф	6,207,000
Commercial Sales		12,490,638		13,375,000		13,835,000		15,085,000
Industrial Sales		7,467,368		7,922,000		8,245,000		8,985,000
						251,000		272,000
Public Authority Sales		226,101		222,500		•		195,000
Street Lighting Sales		193,937		189,500 85,000		194,250		•
Yard Light Sales		82,614		50,000		84,900 52,350		86,600 53,400
Forfeited Discounts		47,627 110,665		64,000		174,400		•
Merchandise and Jobbing		110,000		500		174,400		177,900 500
Recovery of Bad Debts		-		10,000		20,950		21,400
Sale of Scrap		10,666		•		•		•
Miscellaneous Income		11,076		14,500		17,400		17,750
MISO Revenue		1,601,533		1,500,000		1,968,000		2,100,000
TOTAL OPERATING REVENUES	\$	27,063,181	\$	28,660,000	\$	30,591,000	\$	33,201,550
OPERATING EXPENSES:								
GENERATION-OPERATING & MAINTENANC	<u>Έ:</u>							
Wind Generation - Traverse City	\$	38,318	\$	37,500	\$	15,500	\$	16,000
Brown Bridge		4,363		4,000		600		0
Wind Generation Farm - Charlevoix		33,132		0		500		5,000
Trap and Transfer		22		1,000		1,000		1,000
Union Street Fish Ladder		162		350		250		250
Kalkaska Combustion Turbine		218,900		185,000		265,000		225,000
Sabin Dam								
were in Willi		2,896		4,700		1,000		900
Boardman Dam		2,896 3,289		4,700 3,700		1,000 1,300		900 900
		•		-		•		
Boardman Dam		3,289		3,700		1,300		900
Boardman Dam Operation Supplies		3,289 2,080		3,700 2,100		1,300 850		900 1,500
Boardman Dam Operation Supplies MPPA Purchased Power		3,289 2,080 6,446,442		3,700 2,100 2,850,000		1,300 850 2,733,100		900 1,500 0
Boardman Dam Operation Supplies MPPA Purchased Power MISO Purchased Power		3,289 2,080 6,446,442 0		3,700 2,100 2,850,000 0		1,300 850 2,733,100 716,900		900 1,500 0 1,200,000
Boardman Dam Operation Supplies MPPA Purchased Power MISO Purchased Power Lansing Purchased Power		3,289 2,080 6,446,442 0		3,700 2,100 2,850,000 0 2,500,000		1,300 850 2,733,100 716,900 4,250,000		900 1,500 0 1,200,000 7,200,000
Boardman Dam Operation Supplies MPPA Purchased Power MISO Purchased Power Lansing Purchased Power Stoney Corners - Wind Energy		3,289 2,080 6,446,442 0 0		3,700 2,100 2,850,000 0 2,500,000 1,250,000		1,300 850 2,733,100 716,900 4,250,000 1,550,000		900 1,500 0 1,200,000 7,200,000 1,595,000
Boardman Dam Operation Supplies MPPA Purchased Power MISO Purchased Power Lansing Purchased Power Stoney Corners - Wind Energy Combustion Turbine Power Cost		3,289 2,080 6,446,442 0 0 0 3,657,141		3,700 2,100 2,850,000 0 2,500,000 1,250,000 3,680,000		1,300 850 2,733,100 716,900 4,250,000 1,550,000 3,275,000		900 1,500 0 1,200,000 7,200,000 1,595,000 3,750,000
Boardman Dam Operation Supplies  MPPA Purchased Power MISO Purchased Power Lansing Purchased Power Stoney Corners - Wind Energy Combustion Turbine Power Cost Campbell #3 Power Cost Belle River #1 Power Cost Landfill Gas - Granger Project		3,289 2,080 6,446,442 0 0 3,657,141 3,223,417 2,732,687 15,319	100000000	3,700 2,100 2,850,000 0 2,500,000 1,250,000 3,680,000 3,280,000 2,883,000 250,000		1,300 850 2,733,100 716,900 4,250,000 1,550,000 3,275,000 3,260,000 2,650,000 140,000		900 1,500 0 1,200,000 7,200,000 1,595,000 3,750,000 3,670,000 3,500,000 90,000
Boardman Dam Operation Supplies  MPPA Purchased Power MISO Purchased Power Lansing Purchased Power Stoney Corners - Wind Energy Combustion Turbine Power Cost Campbell #3 Power Cost Belle River #1 Power Cost Landfill Gas - Granger Project  total purchased power		3,289 2,080 6,446,442 0 0 0 3,657,141 3,223,417 2,732,687 15,319		3,700 2,100 2,850,000 0 2,500,000 1,250,000 3,680,000 3,280,000 2,883,000 250,000		1,300 850 2,733,100 716,900 4,250,000 1,550,000 3,275,000 3,260,000 2,650,000 140,000		900 1,500 0 1,200,000 7,200,000 1,595,000 3,750,000 3,670,000 90,000 21,005,000
Boardman Dam Operation Supplies  MPPA Purchased Power MISO Purchased Power Lansing Purchased Power Stoney Corners - Wind Energy Combustion Turbine Power Cost Campbell #3 Power Cost Belle River #1 Power Cost Landfill Gas - Granger Project  total purchased power Coal Dock		3,289 2,080 6,446,442 0 0 3,657,141 3,223,417 2,732,687 15,319 16,075,006 8,971		3,700 2,100 2,850,000 0 2,500,000 1,250,000 3,680,000 3,280,000 2,883,000 250,000 16,693,000 8,400		1,300 850 2,733,100 716,900 4,250,000 1,550,000 3,275,000 3,260,000 2,650,000 140,000 18,575,000 2,150		900 1,500 0 1,200,000 7,200,000 1,595,000 3,750,000 3,670,000 90,000 21,005,000 4,500
Boardman Dam Operation Supplies  MPPA Purchased Power MISO Purchased Power Lansing Purchased Power Stoney Corners - Wind Energy Combustion Turbine Power Cost Campbell #3 Power Cost Belle River #1 Power Cost Landfill Gas - Granger Project  total purchased power  Coal Dock Communications		3,289 2,080 6,446,442 0 0 3,657,141 3,223,417 2,732,687 15,319 16,075,006 8,971 5,164		3,700 2,100 2,850,000 0 2,500,000 1,250,000 3,680,000 3,280,000 2,883,000 250,000 16,693,000 8,400 6,000		1,300 850 2,733,100 716,900 4,250,000 1,550,000 3,275,000 2,650,000 140,000 18,575,000 2,150 500		900 1,500 0 1,200,000 7,200,000 1,595,000 3,750,000 3,670,000 90,000 21,005,000 4,500 550
Boardman Dam Operation Supplies  MPPA Purchased Power MISO Purchased Power Lansing Purchased Power Stoney Corners - Wind Energy Combustion Turbine Power Cost Campbell #3 Power Cost Belle River #1 Power Cost Landfill Gas - Granger Project  total purchased power Coal Dock Communications Safety		3,289 2,080 6,446,442 0 0 3,657,141 3,223,417 2,732,687 15,319 16,075,006 8,971 5,164 5,741		3,700 2,100 2,850,000 0 2,500,000 1,250,000 3,680,000 3,280,000 2,883,000 250,000 16,693,000 8,400 6,000 9,000		1,300 850 2,733,100 716,900 4,250,000 1,550,000 3,275,000 3,260,000 140,000 18,575,000 2,150 500 4,100		900 1,500 0 1,200,000 7,200,000 1,595,000 3,750,000 3,670,000 90,000 21,005,000 4,500 550 4,200
Boardman Dam Operation Supplies  MPPA Purchased Power MISO Purchased Power Lansing Purchased Power Stoney Corners - Wind Energy Combustion Turbine Power Cost Campbell #3 Power Cost Belle River #1 Power Cost Landfill Gas - Granger Project  total purchased power  Coal Dock Communications Safety Tools		3,289 2,080 6,446,442 0 0 3,657,141 3,223,417 2,732,687 15,319 16,075,006 8,971 5,164 5,741 9,833		3,700 2,100 2,850,000 0 2,500,000 1,250,000 3,680,000 2,883,000 250,000 16,693,000 8,400 6,000 9,000 2,500		1,300 850 2,733,100 716,900 4,250,000 1,550,000 3,275,000 2,650,000 140,000 18,575,000 4,100 500		900 1,500 0 1,200,000 7,200,000 1,595,000 3,750,000 3,670,000 90,000 21,005,000 4,500 550 4,200 1,500
Boardman Dam Operation Supplies  MPPA Purchased Power MISO Purchased Power Lansing Purchased Power Stoney Corners - Wind Energy Combustion Turbine Power Cost Campbell #3 Power Cost Belle River #1 Power Cost Landfill Gas - Granger Project  total purchased power Coal Dock Communications Safety		3,289 2,080 6,446,442 0 0 3,657,141 3,223,417 2,732,687 15,319 16,075,006 8,971 5,164 5,741		3,700 2,100 2,850,000 0 2,500,000 1,250,000 3,680,000 3,280,000 2,883,000 250,000 16,693,000 8,400 6,000 9,000		1,300 850 2,733,100 716,900 4,250,000 1,550,000 3,275,000 3,260,000 140,000 18,575,000 2,150 500 4,100		900 1,500 0 1,200,000 7,200,000 1,595,000 3,750,000 3,670,000 90,000 21,005,000 4,500 550 4,200

	FY 09/10 Actual	FY 10/11 Budgeted	FY 10/11 Projected	FY 11/12 Recommended
TCLP Equipment Maintenance	648	1,000	700	750
Miscellaneous	<u>1</u>	<u>750</u>	<u>50</u>	<u>100</u>
Total Generation O & M	16,737,702	<u>17,119,000</u>	19,069,500	21,477,900
DISTRIBUTION OPERATION & MAINTEN	ANCE:			
Office Supplies	8,918	7,100	8,000	8,200
Operation Supplies	36,258	32,000	38,650	39,450
Utilities	49,823	60,300	43,600	44,500
Communications	24,806	27,500	18,000	18,400
Supervision and Maintenance	613,505	555,000	710,500	725,000
Substation	192,349	130,000	232,650	237,350
Overhead Lines	425,093	315,000	515,500	525,850
Load and Dispatching	540,880	510,000	567,150	578,500
Underground Lines	230,710	295,000	160,450	163,700
Customer Installations	27,366	21,600	43,550	44,450
Electric Meters	38,343	35,000	69,800	71,200
Street Lighting	129,576	324,000	276,700	282,250
Traffic Signal Oper. & Maint.	69,973	180,600	153,000	156,100
Radio Equipment	256	0	1,850	1,900
Plant & Structures	280,603	235,000	207,700	211,900
Shop Labor	125,548	139,000	92,050	93,900
Safety	62,468	60,000	33,150	33,850
Tools	16,488	14,000	18,350	18,750
Professional and Contractual	19,395	33,000	33,300	34,000
Rent Expense	2,850	5,100	3,000	3,100
Professional Development	107,291	100,000	152,050	155,100
Printing and Publishing	597	1,800	1,500	1,550
Miscellaneous	2,022	2,900	200	250
Inventory Adjustments	<u>307</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Distribution O & M	<u>3,005,426</u>	<u>3,083,900</u>	3,380,700	<u>3,449,250</u>
TRANSMISSION OPERATIONS & MAINTE				
Supervision & Maintenance	13,882	12,000	18,650	19,050
Substation	18,126	8,000	58,750	60,000
Overhead Lines	47,946	24,100	38,500	39,300
Load and Dispatching	54,057	93,500	56,500	57,650
Underground Lines	0	0	150	200
MISO Transmission	19,987	21,000	20,000	20,400
Professional and Contractual	3,500	0	0	0
Miscellaneous	<u>28,665</u>	<u>20,000</u>	<u>48,400</u>	<u>49,400</u>
Total Transmission O & M	<u>186,162</u>	<u>178,600</u>	<u>240,950</u>	<u>246,000</u>

	FY 09/10 Actual	FY 10/11 Budgeted	FY 10/11 Projected	FY 11/12 Recommended
METERING & CUSTOMER ACCOUNTING:				
Salaries and Wages	276,411	304,000	270,100	275,000
Fringe Benefits	124,634	158,100	148,700	158,500
Office Supplies	3,944	4,750	4,500	4,750
Operation Supplies	141	350	0	0
Communications	594	850	800	850
Meal Payments	212	350	150	200
Safety	8	100	0	100
Uniforms	2,124	1,750	2,500	2,550
Professional and Contractual	42,410	12,500	41,500	42,350
Postage	37,920	39,000	34,650	35,350
Uncollectable Accounts	50,979	50,000	65,000	66,300
Collection Costs	770	1,000	500	550
Data Processing	15,253	18,000	20,050	20,500
Transportation	149	400	4,950	5,050
Professional Development	2,878	3,750	2,450	2,500
Printing and Publishing	7,946	11,000	4,150	4,250
Vehicle Rentals	14,877	18,500	12,050	12,300
Miscellaneous	14,877 1,926	3,000	900	950
Miscenarieous	1,920	<u>3,000</u>	<u>900</u>	950
Total Customer Accounting	<u>583,173</u>	<u>627,400</u>	<u>612,950</u>	<u>632,050</u>
ONSERVATION & PUBLIC SERVICES:				
Professional and Contractual	15,964	25,000	43,200	120,000
Public Service & Communications	29,823	30,000	62,500	203,500
Marketing & Public Services	6,063	7,500	0	0
In-Kind Community Services	75,016	120,000	68,700	70,100
Community Investment Fund	56,985	75,000	54,900	0
CFL Grant Expense	59,032	26,200	30,850	0
LED Street Lighting Grant Expense	6,031	0	125,000	0
Energy Audits	2,320	5,000	0	0
Community Relations Liaison	0	0	0	155,000
PA295 Energy Optimization Compliance	170,606	275,000	391,000	526,000
Increased Energy Optimization Efforts	<u>0</u>	<u>0</u>	<u>0</u>	500,000
Total Conservation & Public Services	<u>421,841</u>	563,700	<u>776,150</u>	<u>1,574,600</u>
DMINISTRATIVE AND GENERAL:				
Salaries and Wages	672,882	775,000	745,350	760,300
Fringe Benefits	188,585	203,000	256,650	261,800
Office Supplies	11,593	13,000	8,250	8,450
Communications	9,292	10,000	7,050	7,200
	54,514	56,000	60,450	61,700
Fees and Per Diem	77.717			
Fees and Per Diem Board Related Expenses	11,348	10,500	7,600	7,750

	FY 09/10 Actual	FY 10/11 Budgeted	FY 10/11 Projected	FY 11/12 Recommended
Legal Services	112,140	80,000	83,350	85,000
Employee Appreciation	8,053	7,000	12,800	13,100
Rent Expense	581	1,500	0	0
City Fee	1,374,844	1,450,000	1,556,900	1,687,850
Transportation	4,074	3,800	9,100	4,500
Professional Development	19,225	20,000	39,600	40,400
Printing & Publishing	8,225	8,500	3,450	3,550
Insurance and Bonds	80,809	90,000	71,350	72,800
Miscellaneous	6,392	8,500	11,750	12,000
Depreciation Expense	<u>1,624,621</u>	<u>1,665,000</u>	<u>1,695,000</u>	<u>1,715,000</u>
Total Administrative and General	4,322,090	4,486,800	4,579,650	4,752,550
Total Operating Expenses	25,256,394	26,059,400	28,659,900	32,132,350
Operating Income / (Loss)	<u>\$1,806,788</u>	\$2,600,600	<u>\$1,931,100</u>	<u>\$1,069,200</u>
NON OPERATING REVENUES/(EXPENSES):				
Rents and Royalties	\$31,976	\$56,050	\$44,150	\$45,400
Pole Rentals	35,662	35,650	31,750	31,750
Reimbursements	214,759	140,700	335,150	228,650
Interest & Dividend Earnings	557,209	250,000	491,850	500,000
Gain/(Loss) on Sale of Fixed Assets	(12,431)	0	0	0
Total Non Operating Revenue/(Expenses)	827,175	482,400	902,900	805,800
NET INCOME/(LOSS)	\$2,633,962	\$3,083,000	\$2,834,000	\$1,875,000

Traverse City Light & Power
Fiber Optics Fund
2011-12 Budgeted Revenues and Expenses

	FY 09/10 Audited	FY 10/11 Budgeted	FY 10/11 Projected	Re	FY 11/12 commended
Operating revenues:					
Charges for services	\$ 167,692	\$ 192,800	\$ 183,600	\$	216,850
Wifi sales & commissions	123	20,000	ы		
Miscellaneous	4,464	ca .			<b>a</b>
Total operating revenues	\$ 172,156	\$ 212,800	\$ 183,600	\$	216,850
Operating expenses:					
Office & operating supplies	\$ 2,542	\$ 4,600	\$ 2,150	\$	2,200
Supervision & maintenance	32,628	33,600	13,650		15,000
Overhead & Underground lines	5,753	1,500	6,800		7,000
Customer installations	12,279	18,700	2,500		2,750
Termination boxes	20,389	21,000	45,500		46,200
Wifi operations & maintenance	-	-	3,500		30,000
Tools	1,314	2,750	850		900
Professional services		82,200	750		20,000
Legal services	2,612	1,000	800		500
Rent expense	8,214		to to		-
City fee	8,608	10,600	9,150		10,800
Professional development	100	1,500	-		500
Insurance	ESI	, les	1,250		1,300
Repair and maintenance	544	5,000	150		450
Vehicle rental		1,000	<b>#</b>		-
Miscellaneous		350	100		150
Depreciation expense	84,745	99,500	85,400		86,500
Total operating expenses	179,727	 283,300	172,550		224,250
Operating income/(loss)	(7,571)	 (70,500)	 11,050		(7,400)
Non-operating revenues:					
Reimbursements	53,486	86,500	24,250		37,400
Rombaroomonto			,		
Net income	\$ 45,915	\$ 16,000	\$ 35,300	\$	30,000



To:

Light and Power Board

From:

Ed Rice, Executive Director

Date:

June 8, 2011

Subject:

Rate Stabilization Resolution

Along with City Commission concerns over specific budget expense line items that caused the Commission to not approve the Light & Power budget on June 6, 2011; at least one Commissioner requested a guarantee from Light & Power that customers see some type of rate relief during this period of economic recovery.

While neither utility staff nor the Board can give an "absolute" guarantee regarding this issue before a proposal receives a majority vote of the Board, there has been a verbal consensus of the Board at previous meetings to provide ratepayer relief in some form.

Because this guarantee from the utility has been tied to a Commissioner's vote in adopting the Light & Power budget for 2011-12, and recognizing that no absolute guarantee can be given, the attached proposed resolution has been drafted for your consideration.

Staff believes that adoption of the attached resolution by the Board will demonstrate a commitment that the utility intends to consider a rate stabilization program as soon as practicable.

The following m	otion would be a	ppropriate if you	agree with staff	's recommendation:

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

THAT THE LIGHT & POWER BOARD ADOPTS THE RESOLUTION IN SUPPORT OF A CUSTOMER RATE STABILIZATION PROGRAM AND DIRECTS STAFF TO FORWARD THE RESOLUTION TO THE CITY COMMISSION ALONG WITH ITS REQUIRED BUDGET FOR 2011-12.



# RESOLUTION IN SUPPORT OF A CUSTOMER RATE STABILIZATION PROGRAM

**WHEREAS**, Traverse City Light & Power is a municipal owned electric utility that shall be operated for the benefit of the City of Traverse City in accordance with Traverse City Charter §118; and

WHEREAS, The Traverse City Light & Power Board has the sole authority to fix rates to be charged for electricity to its customers pursuant to Traverse City Charter §179(h); and

**WHEREAS**, the Traverse City Light and Power Board shall fix such rates that are fair, reasonable and shall be uniform for all customers within the same class; but different schedules may be applied to different classes of customers as determined by the Board.

**WHEREAS**, The Traverse City Light & Power Board desires to implement a rate stabilization program that will insulate its customers from the increased costs of purchased power during this period of economic recovery,

NOW, THEREFORE, BE IT RESOLVED that the Board of Traverse City Light and Power resolves to consider a rate stabilization program for its customers within 60 days of the beginning of Fiscal Year 2011-12.



To: Light and Power Board

From: Karen Feahr, Energy Supply Manager KEH

**Date:** June 14, 2011

**Subject:** Renewable Energy Plan

Public Act 295 requires municipal utilities to file an updated Renewable Energy Plan ("REP") with the Michigan Public Service Commission ("MPSC") by July 1, 2011. All utilities in Michigan are required to show that they will meet a 10% renewable energy standard by 2015. PA 295 states that two or more municipally owned electric utilities that serve fewer than 15,000 customers may file jointly. As a result, Light & Power is joining other municipalities in a joint filing. PA 295 requires the REP to explain how the electric provider intends to meet the renewable energy targets specified in the Act. The initial filing was made in April 2009. An updated filing is required every two years. The attached documents contain this year's filing for Light & Power.

Light & Power's REP shows that it will have more than the required Renewable Energy Credits ("RECs") for the 2012-2029 time periods. One REC equals one megawatt hour. Light & Power will meet and exceed the requirements by continuing the operation of its existing wind turbine, purchasing electric energy from Heritage Stoney Corners' Wind Project, Granger Electric Company's landfill gas project and North American Natural Resources' ("NANR") landfill gas project. According to the REP, Light & Power will supply 13.5% of its energy requirements from renewable energy by 2015 and have excess RECs to sell from 2012 through 2029. The selling of RECs represents a source of income to Light & Power which will reduce overall power supply costs.

# FOR PRESENTATION PURPOSES ONLY

RENEWABLE ENERGY PLAN SUMMARY

TRAVERSE CITY

Sales Forecast - 3 yr running average	Units MWH	318,903	318,994	323,518	328,462	2015 331,789
RPS Requirement	MWH	ı	31,899	32,352	32,846	33,179
RPS Required REC's (-) RECs from Existing Renew Energy Supply (Baseline) <b>RECS - Incremental Difference</b>	RECS RECS RECS	- 778 (778)	31,899 778 31,121	32,352 778 31,574	32,846 778 32,068	33,179 778 32,401
FACTOR Required New RECS	RECS		0.20	0.33	0.50	1.00
RPS Renewable Energy Credit Compliance Required New RECs	RECS	(778)	6,224	10,419	16.034	32 401
RECs Obtained from New Resources	RECS	31,895	35,342	40,757	42,739	43,848
RECs Over / (Short) without carryover	RECS	32,673	29,118	30,337	26,705	11,447
REC Purchases / (Sales)	RECS		(3,800)	(13,788)	(33,500)	(21,436)
Cumulative RECs Compliance Balance	RECS	44,272	69,590	86,139	79,344	69,356
Incremental Compliance with New RECs	%	NA	268%	391%	267%	135%
Compliance % with Cumulative REC Balance	%	A	1218%	927%	295%	314%

### TRAVERSE CITY LIGHT & POWER

# RENEWABLE ENERGY PLAN U-16635

# July 1, 2011

- Based on this Renewable Energy Plan (REP) Traverse City Light & Power (City) will have the required Renewable Energy Credits (RECs) for the REP time period of 2012-2029 thereby complying with PA 295.
- The primary sources of RECs are participation in the Michigan Public Power Agency (MPPA) Granger and North American Natural Resources (NANR) Projects, the City's existing wind generation, and the City's wind farm power purchase agreement. The Granger and NANR Projects will utilize landfill gas for electric power generation from a variety of locations in Michigan and possibly in neighboring states. The current schedule calls for additional Granger and NANR projects to begin commercial operation between 2011 and 2014.
- The City will have excess RECs to sell from 2012 through 2029. Selling of RECs represents a source of income to the City which will reduce overall power supply costs. The cost per REC will be determined to a large extent by market forces once the Michigan REC market is designed and implemented. This REP assumes the sale of some of the excess RECs keeping the balance in reserve.
- The City had a pre-existing policy in place to develop and include renewable energy project costs with their power supply cost recovery, therefore, there are no incremental costs of compliance. If RECs were to be purchased at some point in the future then there would be an incremental cost of RECs for the additional RECs purchased and would be included in a surcharge accordingly.
- The City will comply with Section 45 of PA 295 which refers to methods of notification to customers charges, if any, for costs associated with its REP.

# ATTACHMENT C - RENEWABLE ENERGY PLAN SURCHARGE SUMMARY FOR MUNICIPAL UTILITIES

	ITEM Sales Forecast - 3 yr running average 10% Compliance Factor	<u>Units</u> MWH		;	<u>2009</u> 328,416	<b>2010</b> 323,605		<b>2011</b> 8,903	<b>2012</b> 318,994 0.10	<u>2013</u> 323,518 0.10	<b>2014</b> 328,462 0.10	<b>2015</b> 331,789 0.10	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
	RPS Requirement	MWH			-	-		-	31,899	32,352	32,846	33,179	33,179	33,179	33,179	33,179	33,179
	RPS Required REC's	RECS			-	-		-	31,899	32,352	32,846	33,179	33,179	33,179	33,179	33,179	33,179
	(-) REC's from Existing Renew. Energy Supply (Baseline) RECS - Incremental Difference	RECS RECS			778 (778)	<u>778</u> (778)		<u>778</u> _	778 31,121	778 31,574	778 32,068	778 32,401	778 32,401	778 32,401	778 32,401	778 32,401	778 32,401
	FACTOR				-	-	•	(110)	0.20	0.33	0.50	1.00	1.00	1.00	1.00	1.00	
	Required New RECS	RECS			-				6,224	10,419	16,034	32,401	32,401	32,401	32,401	32,401	1.00 32,401
	RPS Renewable Energy Credit Compliance																
	Total RPS Required REC's	RECS			_	_		_	6,380	10,676	16,423	33,179	33,179	33,179	33,179	33,179	33,179
	Required New RECs	RECS			-	(778)	)	(778)	6,224	10,419	16,034	32,401	32,401	32,401	32,401	32,401	32,401
*	RECs Obtained from New Resources	RECS			_	10,821		1,895	35,342	40,757	42,739	43,848	43,565	43,386	43,309	43,283	43,283
	RECs Over / (Short) without carryover	RECS			-	11,599		2,673	29,118	30,337	26,705	11,447	11,164	10,985	10,908	10,882	10,882
	REC Purchases / (Sales)	RECS			-	_		-	(3,800)	(13,788)	(33,500)	(21,436)	(16,964)	(14,785)	(14,708)	(14,682)	(14,682)
	Cumulative RECs Compliance Balance	RECS			-	11,599	4	4,272	69,590	86,139	79,344	69,356	63,556	59,756	55,956	52,156	48,356
	Incremental Compliance with New RECs	%			NA	NA	i.	NA	568%	391%	267%	135%	134%	134%	134%	134%	134%
	Compliance % with Cumulative REC Balance	%			NA	NA	•	NA	1218%	927%	595%	314%	296%	284%	273%	261%	249%
	Revenue Requirements for New Renewables																
*	Build	\$		\$	- \$	-	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	<b>-</b> \$	_
	PPA	\$	;	\$	- \$	-	\$	- \$	- \$	- \$	•	- \$	- \$	- \$	•	- \$	-
	REC Purchases (Sales)	\$		\$	\$_		\$	- \$	- \$	- \$		- \$	\$	\$	- \$	- \$	-
	Total	\$	;	\$	- \$	-	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
	New RECs Obtained Generation Based																
*	Build	MWH			-	_		_	-	-	_	-	-	_	_	-	_
	PPA	MWH			-	10,728	3	1,623	34,507	38,999	40,332	41,614	41,871	41,871	41,871	41,871	41,871
	Subtotal	MWH	-			10,728		1,623	34,507	38,999	40,332	41,614	41,871	41,871	41,871	41,871	41,871
	Purchase (Sold) From New RECS	RECs			_	_		-	(3,800)	(13,788)	(33,500)	(21,436)	(16,964)	(14,785)	(14,708)	(14,682)	(14,682)
*	Incentive (SB 213 Sec 39 (2))	RECS				92		272	835	1,757	2,407	2,234	1,694	1,515	1,438	1,412	1,412
	Total	RECS			-	10,821	3	1,895	31,542	26,969	9,239	22,413	26,601	28,601	28,601	28,601	28,601
	Forecasted Transfer Price per MWH - SUGGESTED	\$/MWH			-	-		-	-	-	-	-	-	-	-	-	-
	Amount recovered through PSCR	•															
	Transfer price x volume of energy	\$			-	-		•	-	-	-	-	-	-	-	<u>-</u>	-
	Incremental Cost of Compliance	\$	\$	\$	- \$	-	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
	Non-Volumetric Surcharge Meter (or customer) Forecast (Number)																
	Residential	No.			8,733	8,670		8,760	8,804	8,848	8,892	8,937	8,981	9,026	9,071	9,117	9,162
	Secondary (Commercial)	No.			3,001	2,983	3	3,020	3,050	3,059	3,069	3,078	3,087	3,096	3,106	3,115	3,124
	Primary (Industrial)	No.	_		<u>43</u>	40		40	40	40	40	40	40	40	40	40	40
	Total	No.			11,777	11,693	11	1,820	11,894	11,947	12,001	12,055	12,108	12,162	12,217	12,272	12,326
	Maximum Surcharge (all rate classes at caps)																
	Residential	\$ / MO	\$ 3.00	\$	- \$	-	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
	Commercial	\$ / MO	\$ 16,58	\$	- \$	-	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	_
	Industrial	\$ / MO	\$ 187.50	\$	- \$	-	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
	Streetlights	\$ / MO	\$ 16.58	\$	- \$	-	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
	Unmetered	\$ / MO	\$ 0.60	5	- \$	-	\$	- \$	- \$	<u> </u>	- \$	<u> </u>	- \$	<u> </u>	- \$	- \$	-
	Total	\$ / MO	\$	•	- \$	-	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
	Planned Surcharge																
	Residential	\$	\$ - 9	6	- \$		\$	- \$	- \$	- \$	- \$	•	- \$	- \$	- \$	- \$	_
	Commercial	\$	\$ - 9	•	- \$	-	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	
	Industrial	\$	\$ - 9	\$	- \$	_	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	_
	Streetlights	\$	\$ - \$	;	- \$		\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	_
	Unmetered	\$	\$ - §	<u> </u>	<u> </u>		\$	<u>- \$</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	- \$	<u> </u>	\$	-
	Total		\$	\$	- \$	-	\$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-

	2021		<u>2022</u>		2023		<u>2024</u>		2025		<u>2026</u>		<u>2027</u>		2028	!	2029
	33,179		33,179		33,179		33,179		33,179		33,179		33,179		33,179		33,179
	33,179		33,179		33,179		33,179		33,179		33,179		33,179		33,179		33,179
	778		778 32,401														
	32,401																
	1.00		1.00		1.00		1.00		1.00	_	1,00		1.00		1.00		1.00
	32,401		32,401		32,401		32,401		32,401		32,401		32,401		32,401		32,401
	33,179		33,179		33,179		33,179		33,179		33,179		33,179		33,179		33,179
	32,401 43,283																
	10,882		10,882		10,882		10,882		10,882		10,882		10,882		10,882		10,882
	(14,682)		(14,682)		(14,682)		(14,682)		(14,682)		(14,682)		(14,682)		(14,682)		(14,682)
	44,556		40,756		36,956		33,156		29,356		25,556		21,756		17,956		14,156
	134% 238%		134% 226%		134% 214%		134% 202%		134% 191%		134% 179%		134% 167%		134% 155%		134% 144%
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	41,871		41,871		41,871		41,871		41,871		41,871		41,871		41,871		41,871
	41,871		41,871		41,871		41,871		41,871		41,871		41,871		41,871		41,871
	(14,682) 1,412																
	28,601		28,601		28,601		28,601		28,601		28,601		28,601		28,601		28,601
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	9,208 3,134		9,254 3,143		9,300 3,153		9,347 3,162		9,394 3,171		9,441 3,181		9,488 3,191		9,535 3,200		9,583 3,210
	40		40		40		40		40		40		40		40		40
	12,382		12,437		12,493		12,549		12,605		12,662		12,719		12,775		12,833
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TRAVERSE CITY
GRANGER - ALL SITES

			2009	2010	2011	2012	2013	2014	2015	2016	2017
CAPACITY FACTOR			0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
NETGENERATION	MWH	*	-	740	1,923	3,269	6,666	9,230	9,743	9,743	9,743
CAPACITY	MW	*	_	0.244	0.244	0.585	1.106	1.236	1.236	1.236	1.236
RENEWABLE ENERGY CREDITS											
BASE GENERATION	RECS		-	740	1,923	3,269	6,666	9,230	9,743	9,743	9,743
ON-PEAK & MICH INCENT RECS	RECS	*	-	92	272	535	1,107	1,607	1,438	1,028	925
TOTAL	RECS		-	833	2,195	3,804	7,774	10,837	11,181	10,771	10,668
GRANGER UNIT COST	\$/ kWh	* \$	- \$	0.07880 \$	0.08077 \$	0.08279 \$	0.08486 \$	0.08698	\$ 0.08916 \$	0.09139 \$	0.09367
O & M	\$/ kWh	* \$	- \$	- \$	- \$	- \$	- \$	-		- \$	-
ADMIN	\$/ kWh	* \$	- \$	0.00082 \$	0.00549 \$	0.00333 \$	0.00163 \$	0.00118		0.00112 \$	0.00112
WDS CHARGES	\$/ kWh	* \$	- \$	0.00002 \$	0.00001 \$	0.00001 \$	0.00001 \$	0.00000		0.00000 \$	0.00000
INCREMENTAL UNIT COST	\$/ REC	\$	- \$	0.07965 \$	0.08627 \$	0.08612 \$	0.08650 \$	0.08816		0.09250 \$	0.09479
TOTAL INCREMENTAL COST	\$	\$	- \$	58,945 \$	165,889 \$	281,540 \$	576,612 \$	813,767		901,257 \$	923,513
WITH PILT	\$	1.04 \$	- \$	61,303 \$	172,525 \$	292,802 \$	599,677 \$	846,317	\$ 914,729 \$	937,308 \$	960,453
INTERCONNECTION COSTS: AMMORTIZ GRANGER SITES	ED	SHARE									
SITE 1	\$	8.13% \$	- \$	- \$	2,439 \$	2,439 \$	- \$	_	\$ - \$	- \$	-
SITE 2	\$	8.13% \$	- \$	3,374 \$	- \$	20,325 \$	- \$	-	\$ - \$	- \$	-
SITE 3	\$	8.13% \$	- \$	5,081 \$	- \$	4,878 \$	4,878 \$	-	\$ - \$	- \$	-
SITE 4	\$	8.13% \$	- \$	- \$	- \$	- \$	2,033 \$	-	\$ - \$	- \$	-
SITE 5	\$	8.13% \$	- \$	- \$	- \$	- \$	10,163 \$	-	\$ - \$	- \$	-
SITE 6	\$	8.13% \$	- \$	- \$	- \$	- \$	- \$	-	\$ - \$	- \$	-
SITE 7	\$	8.13% \$	- \$	- \$	- \$	- \$	- \$	-	\$ - \$	- \$	-
SITE 8	\$	8.13% \$	- \$	- \$	- \$	- \$	- \$	-	\$ - \$	- \$	-
SITE 9	\$	8.13% \$	- \$	- \$	- \$	- \$	- \$	-	\$ - \$	- \$	-
TOTAL	\$	8.13% \$	- \$	8,455 \$	2,439 \$	27,642 \$	17,073 \$	-	\$ - \$	- \$	-
WITH PILT	\$	1.04	\$	8,793 \$	2,537 \$	28,748 \$	17,756 \$	-	\$ - \$	- \$	-
	\$ / MWH		\$	11.88 \$	1,32 \$	8.79 \$	2.66 \$	-	\$ - \$	- \$	-
	\$ / KW-YR		\$	36,053 \$	10,400 \$	49,111 \$	16,059 \$	•	\$ - \$	- \$	-
GRANGER ENERGY COST	\$		-	61,303	172,525	292,802	599,677	846,317	914,729	937,308	960,453
GRANGER INTERCONN COST	\$	\$	- \$	8,793 \$	2,537 \$	28,748 \$	17,756 \$	<u>-</u>		- \$	
GRANGER TOTAL COST	\$	\$	- \$	70,096 \$	175,061 \$	321,550 \$	617,433 \$	846,317		937,308 \$	960,453
GRANGER TOTAL COST	\$ / MWH		\$	94.71 \$	91.04 \$	98.36 \$	92.62 \$	91.69	\$ 93.89 \$	96.20 \$	98.58

	2018		2019		2020		2021		2022		2023		2024		2025		2026		2027		2028		2029
	0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90		0.90
	9,743		9,743		9,743		9,743		9,743		9,743		9,743		9,743		9,743		9,743		9,743		9,743
	1.236		1.236		1.236		1.236		1.236		1.236		1.236		1.236		1.236		1.236		1.236		1.236
	9,743	<b>;</b>	9,743	3	9,743	3	9,743	;	9,743	}	9,743	3	9,743	3	9,743	3	9,743	3	9,743	3	9,743	3	9,743
	925		925		925		925		925		925		925		925		925		925		925		925
	10,668	1	10,668	3	10,668	3	10,668		10,668	i	10,668	3	10,668	3	10,668	3	10,668	3	10,668	3	10,668	3	10,668
\$	0.09601	\$	0.09841	\$	0.10087	\$	0.10340	\$	0.10598	\$	0.10863	\$	0.11135	\$	0,11413	\$	0.11698	\$	0.11991	\$	0.12290	\$	0.12598
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\$	0.00112	\$	0.00112	\$	0.00112	\$	0.00112	\$	0.00112		0.00112	\$	0.00112		0.00112		0.00112		0.00112		0.00112		0.00112
\$	0.00000	\$	0.00000	\$	0.00000	\$	0.00000	\$	0.00000	\$	0.00000	\$	0.00000		0.00000	\$	0.00000		0.00000		0.00000		0.00000
\$	0.09713	\$	0.09953	\$	0.10199	\$	0.10451	\$	0.10710	\$	0.10975	\$	0.11246		0.11525		0.11810		0.12102	\$	0.12402		0.12709
\$	946,326	\$	969,710	\$	993,679	\$	1,018,248	\$	1,043,431	\$	1,069,244	\$	1,095,702	\$	1,122,822	\$	1,150,620	\$	1,179,113	\$	1,208,319		1,238,255
\$	984,179	\$	1,008,498	\$	1,033,426	\$	1,058,978	\$	1,085,168	\$	1,112,014	\$	1,139,530	\$	1,167,735		1,196,645		1,226,278	\$	1,256,652		1,287,785
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	984,179		1,008,498		1,033,426		1,058,978		1,085,168		1,112,014		1,139,530		1.167.735		1,196,645		1,226,278		1,256,652		1,287,785
\$	-										-								-	\$	1,200,002		-
\$	984,179	\$	1,008,498		1,033,426		1,058,978		1,085,168		1,112,014		1,139,530		1,167,735		1,196,645		1,226,278		1,256,652		1,287,785
\$	101.02	\$	103.51	\$	106.07	\$	108.69	\$	111.38	\$	114.14	\$	116.96	\$	1.19.86	\$	122.82	\$	125.86	\$	128.98	\$	132.18

TRAVERSE CITY

North American Renewable Energy - ALL SITES

				2009	2010	2011		2012	2013		2014	2015	2016	2017	2018	2019
CAPACITY FACTOR				0.90	0.90	0.90		0.90	0.90		0.90	0.90	0.90	0.90	0.90	0.90
NETGENERATION		MWH	*	-	-	-		1,538	3,333	4	1,102	4,871	5,128	5,128	5,128	5,128
CAPACITY		WW	*	-	-	-		0.390	0.455	(	).585	0.650	0.650	0.650	0.650	0.650
RENEWABLE ENERGY CRE	DITS															
BASE G	ENERATION	RECS		-	0	0	)	1,538	3,333		4,102	4,871	5,128	5,128	5,128	5,128
ON-PEAK & MICH IN	ICENT RECS	RECS	*	-	-	-		300	650		800	796	666	590	513	487
	TOTAL	RECS		-	0	0		1,838	3,983		4,902	5,667	5,794	5,717	5,640	5,615
NANR UNIT COST		\$/ kWh	* \$	_	\$ 0.07800 \$	0.07995	\$	0.08195 \$	0.08400 \$	: 00	8574 \$	0.08775 \$	0.08994 \$	0.09230 \$	0.09474 \$	0.09727
O & M		\$/ kWh	* \$		\$ - \$		\$	- \$	- 9		- \$	- \$	- \$		- \$	-
ADMIN		\$/ kWh	* \$		\$ 0.00082 \$	0.00085		0.00087 \$	0.00090		0093 \$	0.00096 \$	0.00098 \$		0.00104 \$	0,00108
WDS CHARGES		\$/ kWh	* \$		\$ - \$			0.00002 \$	0.00001 \$		0000 \$	0.00000 \$	0.00000 \$		0.00000 \$	0.00000
INCREMENTAL UNIT COST		\$/ REC	\$		\$ 0.07882 \$	0.08080		0.08284 \$	0.08490 \$		8667 \$	0.08871 \$	0.09093 \$		0.09579 \$	0.09834
TOTAL INCREMENTAL COST		\$	\$		\$ - \$			127,436 \$	282,992 \$		,540 \$	432,128 \$	466,277 \$		491,176 \$	504,293
	WITH PILT	\$	1.04 \$	-	\$ - \$			132,533 \$	294,312 \$		,762 \$	449,413 \$	484,928 \$		510,823 \$	524,464
INTERCONNECTION COSTS: A	AMMORTIZED		SHARE													
SITE 1		\$	8.13% \$	-	\$ - \$	-	\$	- \$	- \$	i	- \$	- \$	- \$	- \$	- \$	-
SITE 2		\$	8.13% \$	_	\$ - \$	-	\$	1,520 \$	1,520 \$	. 1	,520 \$	1,520 \$	1,520 \$	1,520 \$	1,520 \$	1,520
SITE 3		\$	8.13% \$	-	\$ - \$	-	\$	- \$	- \$	; ;	- \$	- \$	- \$	- \$	- \$	-
SITE 4		\$	8.13% \$	-	\$ - \$	-	\$	- \$	- \$	1	- \$	- \$	- \$	- \$	- \$	-
SITE 5		\$	8.13% \$	-	\$ - \$	-	\$	- \$	- \$	i	- \$	- \$	- \$	- \$	- \$	-
SITE 6		\$	8.13% \$	-	\$ - \$	-	\$	- \$	- \$	i	- \$	- \$	- \$	- \$	- \$	-
SITE 7		\$	8.13% \$	_	\$ - \$	-	\$	- \$	- \$		- \$	- \$	- \$	- \$	- \$	-
SITE 8		\$	8.13% \$	-	\$ - \$	-	\$	- \$	- \$		- \$	- \$	- \$	- \$	- \$	•
SITE 9		\$	8.13% \$	•	\$ - \$	-	\$	- \$	- \$		- \$	- \$	- \$	- \$	- \$	-
TOTAL		\$	8.13% \$	-	\$ - \$	•	\$	1,520 \$	1,520 \$	1	,520 \$	1,520 \$	1,520 \$	1,520 \$	1,520 \$	1,520
	WITH PILT	\$	1.04		\$ - \$	•	\$	1,581 \$	1,581 \$	1	,581 \$	1,581 \$	1,581 \$	1,581 \$	1,581 \$	1,581
		\$ / MWH			\$ - \$	-	\$	1.03 \$	0.47 \$		0.39 \$	0.32 \$	0.31 \$	0.31 \$	0.31 \$	0.31
		\$ / KW-YR			\$ - \$	-	\$	4,052 \$	3,473 \$	2	,701 \$	2,431 \$	2,431 \$	2,431 \$	2,431 \$	2,431
NANR ENERGY COST		\$		- '	-	-		132,533	294,312		,762	449,413	484,928	497,659	510,823	524,464
NANR INTERCONN COST		\$	\$	-	\$ <u> </u>	_	\$	1,581 \$	1,581 \$	1	,581 \$	1,581 \$	1,581 \$	<u>1,581</u> \$	1,581 \$	1,581
NANR TOTAL COST		\$	\$	-	\$ - \$	-	\$	134,114 \$	295,893 \$	371	,343 \$	450,994 \$	486,510 \$	499,240 \$	512,405 \$	526,045
NANR TOTAL COST		\$ / MWH			\$ - \$	-	\$	87.18 \$	88.77 \$	9	0.52 \$	92.58 \$	94.88 \$	97.36 \$	99.93 \$	102.59

	2020		2021		2022		2023		2024		2025		2026	2027	2028		2029	
	0.90		0.90		0.90		0.90		0.90		0.90		0.90	0.90	0.90		0.90	
	5,128		5,128		5,128		5,128		5,128		5,128		5,128	5,128	5,128		5,128	5127.805
	0.650		0.650		0.650		0.650		0.650		0.650		0.650	0.650	0.650			0.650407
	5,128	3	5,128	3	5,128	3	5,128	3	5,128	3	5,128	3	5,128	5,128	5,128	:	5,128	5127.805
	487		487		487		487		487		487		487	487	487		487	487.0244
	5,615	;	5,615	i	5,615	;	5,615	<b>;</b>	5,615	;	5,615	į	5,615	5,615	5,615	i	5,615	
\$	0.09988	\$	0.10259	\$	0.10542	\$	0.10837	\$	0.11143	\$	0.11458	\$	0.11780	\$ 0.12111	\$ 0.12451	\$	0.12801	
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	_	
\$	0.00111	\$	0.00114	\$	0.00117	\$	0.00121	\$	0.00125	\$	0.00128	\$	0.00132	\$ 0.00136	\$ 0.00140	\$	0.00144	
\$	0.00000	\$	0.00000	\$	0.00000	\$	0.00000	\$	0.00000	\$	0.00000	\$	0.00000	\$ 0.00000	\$ 0.00000	\$	0.00000	
\$	0.10099	\$	0.10373	\$	0.10659	\$	0.10958	\$	0.11268	\$	0.11587	\$	0.11913	\$ 0.12247	\$ 0.12591	\$	0.12945	
\$	517,856		531,928	\$	546,591	\$	561,913	\$	577,794	\$	594,134	\$	610,860	\$ 628,014	\$ 645,650	\$	663,812	
\$	538,570	\$	553,205	\$	568,454	\$	584,390	\$	600,906	\$	617,900	\$	635,294	\$ 653,135	\$ 671,476	\$	690,365	
\$ \$	- 1,520	\$	- 1,520	\$	- 1,520	\$	- 1,520	\$ \$	- 1,520	\$	- 1,520	\$	- 1,520	\$ - 1,520	\$ - 1,520	\$	- 1,520	
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ _	\$ -	\$	-	
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$ _	\$	-	
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	
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\$	-	\$	-	\$	-	\$	-	\$	-	\$	•	\$	-	\$ -	\$ -	\$	-	
\$	-	\$	-	\$	-	\$		\$	-	\$		\$	-	\$ -	\$ -	\$	-	
\$	1,520		1,520		1,520		1,520		1,520		1,520		1,520	1,520	1,520	\$	1,520	
\$	1,581	\$	1,581	\$	1,581	\$	1,581	\$	1,581	\$	1,581	\$	1,581	\$ 1,581	\$ 1,581	\$	1,581	
\$	0.31	\$	0.31	\$	0.31	\$	0.31	\$	0.31	\$	0.31	\$	0.31	\$ 0.31	\$ 0.31	\$	0.31	
\$	2,431	\$	2,431	\$	2,431	\$	2,431	\$	2,431	\$	2,431	\$	2,431	\$ 2,431	\$ 2,431	\$	2,431	
	538,570		553,205		568,454		584,390		600,906		617,900		635,294	653,135	671,476		690,365	
\$	1,581	\$	1,581	\$	1,581	\$	1,581	\$	1,581	\$	1,581	\$	1,581	\$ 1,581	\$ 1,581	\$	1,581	
\$	540,151	\$	554,786	\$	570,035	\$	585,971	\$	602,487	\$	619,481	\$	636,875	\$ 654,716	\$ 673,057	\$	691,946	
\$	105.34	\$	108.19	\$	111.17	\$	114.27	\$	117.49	\$	120.81	\$	124.20	\$ 127.68	\$ 131.26	\$	134.94	

A	В	C	D	E	F	G	Н	I	J	К	L	М	N '	0	Р	Q	R	S	Т	U	V	W	Х	Y
TRAVERSE CITY REQUIRED RECS	RECS	Total	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
REQUIRED RECS	RECS	TOtal	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
LOAD - 3 YEAR AVERAGE		***	328,413	326,380	318,903	318,994	323,518	328,462	331,789															
FACTOR						0.10	0.10	0.10	0.10															
RECS - REQUIRED		594,781				31,899	32,352	32,846	33,179	33,179	33,179	33,179	33,179	33,179	33,179	33,179	33,179	33,179	33,179	33,179	33,179	33,179	33,179	
RECS - PRE-REP RECS (BASELINE)			770	770	770	770	770	770	770	770	770	770	770	770	770	770	770	770	770			<u> </u>		
RECS - PRE-REP RECS (BASELINE) RECS - INCREMENTAL DIFFERENCE			778	778	778	778 31,121	778 31,574	778 32,068	778 32,401		778 32,401													
NEGO - INCINENTAL DILI ENENCE						31,121	31,374	32,000	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	
FACTOR						0.20	0.33	0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
RECS - NEW REQUIRED		518,691				6,224	10,419	16,034	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	
SOURCES			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
SOURCES			2003	2010	2011	2012	2013	2014	2013	2010	2011	2010	2015	2020	2021	2022	2023	2024	2025	2020	2027	2026	2029	
EXISTING RENEWABLE SOURCES																								
ADDITIONS	RECS		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1	-	-	
XXX	RECS		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL	RECS RECS		-	-	-						-		-	-	-	-	-	-	-	-		-	-	
TOTAL	REUS		-	-	-	-	-	-	-	-	-	-	-	-			-	-			-	-	-	
			-	-	-																-	$\overline{}$		
			-	-	-																			
NEW RENEWABLES:	B				00																	T		
GRANGER (MPPA)	RECS RECS		-	833	2,195	3,804 1,838	7,774	10,837	11,181	10,771	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10,668	
NANR (MPPA) STONEY CORNERS - wind	RECS			9,988	29,700	29,700	3,983 29,000	4,902 27,000	5,667 27,000	5,794 27,000	5,717 27,000	5,640 27,000	5,615 27,000	5,615 27,000	5,615 27,000									
	RECS			5,500	20,100	20,100	20,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	
	RECS																							
	RECS																							
	RECS																				*			
TOTAL NEW RENEWABLES  TOTAL OTHER RENEWABLES (without Grange	RECS		-	10,821	31,895	35,342	40,757	42,739	43,848	43,565	43,386	43,309	43,283	43,283	43,283	43,283	43,283	43,283	43,283	43,283	43,283	43,283	43,283	
TOTAL OTHER RENEWABLES (without Grange LESS PURCHASES/(SALES) by City	and NANK)		-	9,988	29,700	29,700	29,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	
TOTAL SOURCES		811,775	-	10,821	31,895	35,342	40,757	42,739	43,848	43,565	43,386	43,309	43,283	43,283	43,283	43,283	43,283	43,283	43,283	43,283	43,283	43,283	43,283	
TOTAL BOOKGES		3,		,52.1	2.,000	30,016	.0,101	,,,,,,,	.0,040	.0,500	.0,000	,0,000	10,200	10,200	.0,200	10,200	10,200	40,200	70,200	70,200	70,200	70,200	70,200	
																				7.				
USES		70			-																			
EXISITNG SITE - 2009	RECS	TOTAL	500						15.50	-			5,50	200			-				$\longrightarrow$			
EXISITING SITE - 2009  EXISITING SITE - 2010	RECS	-	-		-	-		-	-	-			-	-	-	-				-	-	-	-	
EXISITING SITE - 2011	RECS		-					-															-	-
GRANGER SITES - 2010	RECS	833				833	-																	
GRANGER SITES - 2011	RECS	2,195				2,195	-	-																
GRANGER SITES - 2012	RECS	3,804	,			3,196	607	-	-															
GRANGER SITES - 2013	RECS	7,774					7,774		-															
GRANGER SITES - 2014 GRANGER SITES - 2015	RECS RECS	10,837 11,181						10,837	11,181	-	-											$\rightarrow$		
GRANGER SITES - 2016	RECS	10,771					-		11,101	10,771			-									-	+	
GRANGER SITES - 2017	RECS	10,668								10,711	10,668	- 1	-									$\overline{}$		
GRANGER SITES - 2018	RECS	10,668										10,668	-	-	-									
GRANGER SITES - 2019	RECS	10,668											10,668	-	-	-								
GRANGER SITES - 2020	RECS	10,668												10,668	-	-	-							
GRANGER SITES - 2021	RECS	10,668													10,668	- 40.000	-	-						
GRANGER SITES - 2022 GRANGER SITES - 2023	RECS	10,668 10,668							-	-						10,668	10,668			-				
GRANGER SITES - 2024	RECS	10,668															10,000	10,668		- :	-			
GRANGER SITES - 2025	RECS	10,668																,	10,668		- :	-		
GRANGER SITES - 2026	RECS	10,668																		10,668	-		-	
GRANGER SITES - 2027	RECS	10,668																			10,668	-	-	
GRANGER SITES - 2028	RECS	10,668				-																10,668	-	
GRANGER SITES - 2029 TOTAL USES	RECS	10,668 186,081	-	-	-	6,224	8,381	10,837	11,181	10,771	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10.668	10.000	10.000	10,668 10,668	
REMAINING NEEDED	NEUO	100,001				6,224	2,038	5,197	21,220	21,630	21,733	21,733	21,733	21,733	21,733	21,733	21,733	21,733	21,733	21,733	10,668 21,733	10,668 21,733	21,733	
							2,000	0,101	- 1,220	21,000	21,100	21,700	21,133	21,133	21,100	21,100	21,100	21,133	21,733	21,133	21,133	21,133	21,133	-
NANR -2010	RECS	-				-	-																	
NANR -2011	RECS	-				-	-	-																
NANR -2012	RECS	1,838				-	1,838		-															
NANR -2013 NANR -2014	RECS	3,983					200	3,783	2 400	-														
NANR - 2014 NANR - 2015	RECS RECS	4,902 5,667						1,414	3,488 5,667	-	-	-			-						$\longrightarrow$	$\longrightarrow$	$\longrightarrow$	$\longrightarrow$
	RECS	5,794							5,007	5,794					-					-	$\rightarrow$			
NANR - 2016	RECS	5,794								0,184	5,717			-		,					$\overline{}$			-+
NANR - 2017		5,640									-,111	5,640				-					+	-	-+	
NANR -2017 NANR -2018	RECS	5,615											5,615	-	-	-								
NANR -2017 NANR -2018	RECS	5,615												5,615	-	-	-							
NANR -2017 NANR -2018	RECS RECS														5,615	N=	-	-						
NANR -2017 NANR -2018 NANR -2019 NANR -2020 NANR -2021	RECS RECS	5,615														5,615	-	-	-					
NANR - 2017 NANR - 2018 NANR - 2019 NANR - 2020 NANR - 2020 NANR - 2021	RECS RECS RECS RECS	5,615															5,615			-				
NANR - 2017 NANR - 2018 NANR - 2019 NANR - 2020 NANR - 2020 NANR - 2021 NANR - 2022 NANR - 2023	RECS RECS RECS RECS RECS	5,615 5,615					-	-					-	-				5,615	5,615	-				
NANR -2017 NANR -2018 NANR -2019 NANR -2020 NANR -2020 NANR -2021 NANR -2022 NANR -2023 NANR -2023 NANR -2024	RECS RECS RECS RECS RECS RECS	5,615 5,615 5,615				- 1												-	0,015	5,615	-	-		
NANR - 2017 NANR - 2018 NANR - 2019 NANR - 2020 NANR - 2021 NANR - 2021 NANR - 2022 NANR - 2023 NANR - 2023 NANR - 2024 NANR - 2025	RECS RECS RECS RECS RECS RECS RECS RECS	5,615 5,615 5,615 5,615																						
NANR - 2016 NANR - 2017 NANR - 2018 NANR - 2019 NANR - 2020 NANR - 2020 NANR - 2021 NANR - 2022 NANR - 2023 NANR - 2023 NANR - 2024 NANR - 2025 NANR - 2025 NANR - 2026 NANR - 2026 NANR - 2027	RECS RECS RECS RECS RECS RECS	5,615 5,615 5,615					-									1				-1-1-		1-		+
NANR - 2017 NANR - 2018 NANR - 2019 NANR - 2020 NANR - 2020 NANR - 2021 NANR - 2022 NANR - 2023 NANR - 2023 NANR - 2024 NANR - 2024 NANR - 2025 NANR - 2026 NANR - 2026 NANR - 2027 NANR - 2027 NANR - 2028	RECS RECS RECS RECS RECS RECS RECS RECS	5,615 5,615 5,615 5,615 5,615																		2,2 /2	5,615			
NANR - 2017 NANR - 2018 NANR - 2019 NANR - 2020 NANR - 2020 NANR - 2022 NANR - 2022 NANR - 2023 NANR - 2023 NANR - 2024 NANR - 2025 NANR - 2025 NANR - 2026 NANR - 2026 NANR - 2026 NANR - 2027 NANR - 2028 NANR - 2028 NANR - 2029	RECS RECS RECS RECS RECS RECS RECS RECS	5,615 5,615 5,615 5,615 5,615 5,615																		.,		-	-	
NANR - 2017 NANR - 2018 NANR - 2019 NANR - 2020 NANR - 2020 NANR - 2021 NANR - 2022 NANR - 2022 NANR - 2023 NANR - 2023 NANR - 2024 NANR - 2025 NANR - 2026 NANR - 2026 NANR - 2026 NANR - 2027 NANR - 2027 NANR - 2028 NANR - 2029 OTAL USES	RECS RECS RECS RECS RECS RECS RECS RECS	5,615 5,615 5,615 5,615 5,615 5,615 5,615	-	-	-	-	2,038	5,197	9,156	5,794	5,717	5,640	5,615	5,615	5,615	5,615	5,615	5,615	5,615	5,615	5,615 5,615	5,615 5,615	- 5,615 5,615	
NANR - 2017 NANR - 2018 NANR - 2019 NANR - 2020 NANR - 2021 NANR - 2022 NANR - 2022 NANR - 2023 NANR - 2023 NANR - 2024 NANR - 2025 NANR - 2026	RECS RECS RECS RECS RECS RECS RECS RECS	5,615 5,615 5,615 5,615 5,615 5,615 5,615 5,615 5,615	-	-	-	-	2,038	5,197	9,156 12,064	5,794 15,836	5,717 16,015	5,640 16,092	5,615 16,118		5,615	5,615	- - 5,615							

Column																								
Column   C	A	В	С	D	E	F	G	H	1	J	K	L	M	N	0	Р	Q	R	S	T	U	V	W	X
Mathematical Column			-				-	-																
Control   Cont	OTHER RENEWABLES - 2011	RECS	-				-		-															
Control   Cont	OTHER RENEWARIES - 2012	RECS	12 064						-	12 064														
Commonweigness   Comm							1	_																
Section   Sect							+	<del></del>		_		40.045												
Section   Sect							+		+ -															
March   Marc							-		1	-	-		16,092											
Section   Sect									1		-		-	16,118										
Section   Sect	OTHER RENEWABLES - 2017	RECS	16,118									-	-	-	16,118									
Control   Cont									1							16 118								
Second											<del>                                     </del>		-				10.110							
Separate Sep							+		-					-										
Column   C		RECS	16,118												-		-	16,118						
Separate Sep	OTHER RENEWABLES - 2021		16,118																16.118					
Controlled   150																				16 110				
Control   Cont							+		-	_	-													
Controlled   Control   C																		-	-	-	. 16,118			
Section   Sect	OTHER RENEWABLES - 2024	RECS	16,118																-	-	-	16,118		
Controlled   Control   C	OTHER RENEWABLES - 2025	RECS	16.118																	_	_		16 118	
Section   Sect																								
Control   Cont									-												-	-	-	16,118
Section   Sect			-																			-	-	-
Mathematical   Math	OTHER RENEWABLES - 2028	RECS	-		1		1						1	1									-	-
Mathematical   Math	OTHER RENEWARIES - 2029	RECS	-																					
No. 2005   10			027.005							40.004	45.000	40.045	40.000	40.440	10.110	10.110	10.110							
	OTAL USES	RECS	231,305		-		-	-	-	12,064	15,836	16,015	16,092	16,118	16,118	16,118	16,118	16,118	16,118	16,118	16,118	16,118	16,118	16,118
																							-	
																1								
Part							1			_		-												
Part	TEO- NEW DECUMEN	-					-																	
Part																								
Part							6,22	4 10,419	16,03	4 32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32,401	32.401
Part	JIFFERENCE																							
State   Stat				-											-					-			-	-
State   Stat	VAIDING	$\rightarrow$						10																
Section   Sect			TOTAL	2009	2010	2011	1 201	2013	3 201	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Consistent of the content of the c	EXISTING	RECS	-																					
Consistent of the content of the c	GRANGER SITES - 2010	RECS	-																					
Control 1985   10   10   10   10   10   10   10   1					-											-								
Control   Cont							1	1	<del>-</del>	1					-	-								
SAME STATE - SAME - SAM							-	1	-	-					0.									
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Control   Cont			_						1							-								
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SMALE STATE WAS ALT WA	GRANGER SITES - 2019	RECS	-														_							
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CAMAGRIEFET	GRANGER SITES - 2023	RECS	-																		-			
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CAMMENDERS   SCORE							1	1																
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GAMESSETIST-2589		RECS	-																					- 1
GAMESSETIST-2589	GRANGER SITES - 2027		-																		3			
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Part	GRANGER SITES - 2020						-	-		-														
MRR 299	GRANGER SITES - 2029																							
MARY - 1975 - MA	OTAL EXPIRING	RECS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MARY 2915   565																								
MARY 2915   565	NANP - 2010	PECS																						
MARY - 2912   MARY - 2913   MARY - 2913   MARY - 2913   MARY - 2914   MA								-		_														
MAYS - 2914									-															
MANR - 2016	NANR -2012	RECS	-							-														
NAME - 2019   RECS   -   -   -   -   -   -   -   -   -	NANR -2013	RECS	-								-													
NAME - 2019   RECS   -   -   -   -   -   -   -   -   -																								
NAM - 2985  ANG - 2915  ANG -																								
NAR - 2017  - 10													-											
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NAN - 2999			. 1							1														
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NAR - 2021   RECS   -							-	+	-	+							-							
NAR - 2022			-															-						
NAR - 2022	NANR -2021	RECS	-																-					
NAR - 2923									1															
NAME - 2024  NAME - 2025  NAME - 2026  NAME							1	1	l	+								-		-				
NANR- 2025							-	+	-	+											-			
NANH 2026  NANH 2027  NECS																			15			-		
NARY-2026 RECS -   C   C   C   C   C   C   C   C   C			-																				-	
NAMR- 2022  RECS			-																	1				_
NAMR - 2028 RECS												-												-
NAME - 2029   RECS   -							1	_						-										
Common No.   Com	MAND 2020						+	1		+					_									
THE RENEWABLES - 2010 RECS 29,70 RECS 17,636 RECS 17,636 RECS 18,882 RECS 10,882 RECS 10,8																								
THE RENEWABLES - 2010 RECS 9,88 W 9,88 W 9,88 W 9 W 9 W 9,88 W 9,	OTAL EXPIRING	RECS	-	-	-	-	-	- 1	-	-	-	-	-	- 1	-	-	-	-	-	-	-	-	-	-
OTHER RENEWABLES - 2011   RECS   29,700																								
OTHER RENEWABLES - 2011   RECS   29,700	OTHER RENEWARIES - 2010	RECO	9 999				1	0 000		1														- 1
OTHER RENEWABLES - 2012 RECS 11,948   9   9   9   9   9   9   9   9   9	OTHER REMEMBER - 2010						-	9,988		1														
OTHER RENEWABLES - 2013 RECS 13,164 M RECS 10,985 M RECS 1	OTHER RENEWABLES - 2011								29,700															
OTHER RENEWABLES - 2013 RECS 13,164 M RECS 10,985 M RECS 1	OTHER RENEWABLES - 2012	RECS	17,636							17.636				7										
OTHER RENEWABLES - 2014 RECS 10,908 RECS 10,908 RECS 10,908 RECS 10,908 RECS 10,908 RECS 10,908 RECS 10,808 RECS 1	OTHER RENEWABLES - 2013										13.164		_											
OTHER RENEWABLES - 2015 RECS 10,988 RECS 10,882 RECS 1							1	1		1	13,104	40.000												
OTHER RENEWABLES - 2016 RECS 10,882									_			10,985												
OTHER RENEWABLES - 2016 RECS 10,882	OTHER RENEWABLES - 2015	RECS	10,908										10,908											
OTHER RENEWABLES - 2017 RECS 10,882														10.882										
OTHER RENEWABLES - 2018 RECS 10,882 RECS 1							1	-		+ +	-			10,002	10.000			-						
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OTHER RENEWABLES - 2020 RECS 10,882 1	OTHER RENEWABLES - 2019		10,882														10,882							
OTHER RENEWABLES - 2021 RECS 10,882 1							1										,	10.000						
OTHER RENEWABLES - 2022     RECS     10,882     10,882     10,882     10,882       OTHER RENEWABLES - 2023     RECS     10,882     10,8							1	1	<del>                                     </del>	1								10,882						
OTHER RENEWABLES - 2023         RECS         10,882								1	l		19								10,882					
OTHER RENEWABLES - 2023 RECS 10,882 1		RECS	10,882																	10,882				
OTHER RENEWABLES - 2024 RECS 10,882 10,882 10,882 10,882 10,882 10,882 10,882	OTHER RENEWABLES - 2023	RECS	10,882																		10.882			
										1											10,002	10.000		
UTHER REPREVABLES - 2023 REUS 10,882 1 1 10,882								_		-												10,882		
										+													10,882	
OTHER RENEWABLES - 2026 RECS 10,882 10,882		RECS	10,882							T														10,882
	OTHER RENEWABLES - 2026																							,
	OTHER RENEWABLES - 2026	RECS						1		<del>                                     </del>				-										
VITED REINSTRUMENTS - CALCO - CLUB -	OTHER RENEWABLES - 2026 OTHER RENEWABLES - 2027	RECS							I				- 1	1	1	1	1	1						
	OTHER RENEWABLES - 2026 OTHER RENEWABLES - 2027 OTHER RENEWABLES - 2028	RECS	-				-																	
OTAL EXPIRING RECS 212,083 9,988 29,700 17,636 13,164 10,985 10,982 10,882 10,882 10,882 10,882 10,882 10,882 10,882 10,882 10,882 10,882 10,882 10,882	OTHER RENEWABLES - 2026 OTHER RENEWABLES - 2027 OTHER RENEWABLES - 2028 OTHER RENEWABLES - 2029	RECS RECS	-																					
10,000 10,	OTHER RENEWABLES - 2026 OTHER RENEWABLES - 2027 OTHER RENEWABLES - 2028 OTHER RENEWABLES - 2029	RECS RECS	-			-	-	9,988	29,700	17,636	13,164	10,985	10,908	10,882	10,882	10,882	10,882	10,882	10,882	10,882	10,882	10,882	10,882	10,882

A	В	ГС	D	E	F	G	Н		J	К	L	M	N	0	Р	Q	R	S	Т	U	V	l w l	Тх	I Y I
REC TRACKING																	- '`				•			
EXISTING	+	-				$\longrightarrow$	<b></b> '	<del> </del>			$\vdash$													
Carryover Start		-			770	4.550	1.550	4.550	4.550	4.550	4.550	4.550	4.550	4.550	1.550									
Now BECs	+	-		770	778	1,556	1,556	1,556		1,556		1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556		$\longrightarrow$
New RECs Use	+	+		778	778	-	-	-				-	-	-	-	-	-	-	-	-	-	-	-	$\vdash$
Use Durch ((Q-III)	+	+				-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	
Purchase/(Sell) Carryover End	+	-					<u> </u>	<del></del>	<del></del>		<del></del>													
Carryover End		-		778	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	1,556	
GRANGER	+	-					$\vdash$	$\vdash$			$\vdash$													
		-																					<u> </u>	
Carryover Start		-		-	833	3,028	607		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
New RECs				833	2,195	3,804	7,774	10,837	11,181	10,771	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10,668	10,668	
Use				-	-	(6,224)	(8,381)	(10,837)	(11,181)	(10,771)	(10,668)	(10,668)	(10,668)	(10,668)	(10,668)	(10,668)	(10,668)	(10,668)	(10,668)	(10,668)	(10,668)	(10,668)	(10,668)	
Purchase/(Sell)																					-			
Carryover End				833	3,028	607	-	-	-	-	1-	-	-	-	-	-	-	-	-	-	-	-	-	
																							$\overline{}$	$\overline{}$
NANR																								$\overline{}$
Carryover Start			-	-	-	-	(1,962)	(3,817)	(7,912)	(15,200)	(19,000)	(22,800)	(26,600)	(30,400)	(34,200)	(38,000)	(41,800)	(45,600)	(49,400)	(53,200)	(57,000)	(60,800)	(64,600)	
New RECs	_			-	-	1,838	3,983	4,902	5,667	5,794		5,640	5,615	5,615	5,615	5,615	5,615	5,615	5,615				1 ' '	
Use	_		-	-		-	(2,038)			(5,794)		(5,640)	(5,615)	(5,615)	(5,615)					5,615	5,615	5,615	5,615	
Purchase/(Sell)	+	_					(2,030)	(5,181)	(9,100)	(3,754)	(3,717)	(3,040)	(5,015)	(5,015)	(5,615)	(5,615)	(5,615)	(5,615)	(5,615)	(5,615)	(5,615)	(5,615)	(5,615)	+
	+				-				-															
Carryover End				-	-	1,838	(17)	(4,112)	(11,400)	(15,200)	(19,000)	(22,800)	(26,600)	(30,400)	(34,200)	(38,000)	(41,800)	(45,600)	(49,400)	(53,200)	(57,000)	(60,800)	(64,600)	
																							. 1	
OTHER RENEWABLES																								
Carryover Start			-	-	9,988	39,688	69,388	88,400	85,700	83,000	81,000	81,000	81,000	81,000	81,000	81,000	81,000	81,000	81,000	81,000	81,000	81,000	81,000	
New RECs				9,988	29,700	29,700	29,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	
Use	1		_	-		-			(12,064)	(15,836)	(16,015)	(16,092)	(16,118)	(16,118)	(16,118)	(16,118)	(16,118)	(16,118)	(16,118)	(16,118)	(16,118)	(16,118)		
Purchase/(Sell)	1		-	-	-		(9,988)	(29,700)	(17,636)	(13,164)	(10,985)	(10,908)	(10,118)	(10,118)	(10,118)	(10,118)	(10,110)	(10,118)	(10,118)	(10,118)	(10,882)	(10,882)	(10,882)	
Carryover End	1			9,988	39,688	69,388	88,400	85,700	83,000	81,000	81,000	81,000	81,000	81,000	81,000									
Carryover Enu	+	1		9,300	33,000	09,308	00,400	00,700	63,000	61,000	01,000	01,000	61,000	01,000	01,000	81,000	81,000	81,000	81,000	81,000	81,000	81,000	81,000	
	+								<del></del>															
Total Carryover	+			11,599	44,272	73,390	89,939	83,144	73,156	67,356	63,556	59,756	55,956	52,156	48,356	44,556	40,756	36,956	33,156	29,356	25,556	21,756	17,956	
Sales from Carryover (a)						(3,800)	(3,800)	(3,800)	(3,800)	(3,800)		(3,800)	(3,800)	(3,800)	(3,800)	(3,800)	(3,800)	(3,800)	(3,800)	(3,800)	(3,800)	(3,800)	(3,800)	
Percent of Requirements carried over		51%				686%	653%	528%	240%	209%	191%	180%	168%	156%	144%	133%	121%	109%	98%	86%	74%	62%		
PURCHASE / (SELL) OF RECS			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2020	
	1										2011	2010	2013	2020	2021	2022	2023	2024	2023	2020	2021	2028	2029	
REC PRICE - MICHIGAN	\$ / MWH	1	\$ 7.00	\$ 7.21 \$	\$ 7.43	\$ 7.65	\$ 7.88	\$ 8.11	\$ 8.36 \$	\$ 8.61	\$ 8.87	\$ 9.13	9.41	9.69	9.98	10.28 \$	10.50	40.04	1100					
REC PRICE - MICHIGAN REC PRICE - ESCALATOR	+ V mivVI		- 1.00	1.03	1,03												10.59		11.23	\$ 11.57 \$		\$ 12.27	\$ 12.64	
NEO FRICE - ESCALATOR	+			1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	$\longrightarrow$
BUNG	+			$\longrightarrow$																				
BUY	RECS								<u> </u>															
EXISITNG	RECS	-				-																		
TOTAL PURCHASE/(SELL) - 2010	RECS	(13,788)				(3,800)	(9,988)																	
TOTAL PURCHASE/(SELL) - 2011	RECS	(33,500)					(3,800)	(29,700)								<u> </u>			1					
TOTAL PURCHASE/(SELL) - 2012	RECS	(21,436)				-	,5,550/	(3,800)	(17,636)			-					+			+	+			
TOTAL PURCHASE/(SELL) - 2013	RECS	(16,964)		+	+			(0,000)	(3,800)	(13,164)							-					$\longrightarrow$		
				+	$\overline{}$	$\longrightarrow$			(3,000)		(10.005)										$\longrightarrow$	$\longrightarrow$		
TOTAL PURCHASE/(SELL) - 2014	RECS	(14,785)		$\rightarrow$	$\rightarrow$			-		(3,800)	(10,985)	(40.000												
TOTAL PURCHASE/(SELL) - 2015	RECS	(14,708)									(3,800)	(10,908)												
TOTAL PURCHASE/(SELL) - 2016	RECS	(14,682)								-		(3,800)	(10,882)											
TOTAL PURCHASE/(SELL) - 2017	RECS	(14,682)									-		(3,800)	(10,882)										
TOTAL PURCHASE/(SELL) - 2018	RECS	(14,682)										-	, ,	(3,800)	(10,882)					+			+	+
TOTAL PURCHASE/(SELL) - 2019	RECS	(14,682)						$\overline{}$					0	(0,000)	(3,800)	(10,882)				$\overline{}$	-	+	$\overline{}$	+
TOTAL PURCHASE/(SELL) - 2020	RECS	(14,682)				-					+		<u> </u>		(3,000)		(40.000)							
										+				0		(3,800)	(10,882)				-			
TOTAL PURCHASE/(SELL) - 2021	RECS	(14,682)													0		(3,800)	(10,882)						
TOTAL PURCHASE/(SELL) - 2022	RECS	(14,682)														0		(3,800)	(10,882)					
TOTAL PURCHASE/(SELL) - 2023	RECS	(14,682)												- 1			0		(3,800)	(10,882)				8
TOTAL PURCHASE/(SELL) - 2024	RECS	(14,682)																0		(3,800)	(10,882)			
TOTAL PURCHASE/(SELL) - 2025	RECS	(14,682)																-	0	(0,000)	(3,800)	(10,882)		-
TOTAL PURCHASE/(SELL) - 2026	RECS	(14,682)				$\overline{}$	$\overline{}$	$\overline{}$			-								-		(3,000)		(10.000)	-
TOTAL PURCHASE/(SELL) - 2027	RECS			+	+	+		$\longrightarrow$		+	+									0		(3,800)	(10,882)	
	KECS						$\longrightarrow$	$\longrightarrow$		$\longrightarrow$	$\longrightarrow$										0		(3,800)	
TOTAL PURCHASE/(SELL) - 2028	050-	(3,800)			1							1			1			1		1	1	0		
TOTAL PURCHASE/(SELL) - 2029	RECS	(3,800)																						
	RECS RECS		×																				0	
			-			(3,800)	(13,788)	(33,500)	(21,436)	(16,964)	(14,785)	(14,708)	(14,682)	(14,682)	(14,682)	(14,682)	(14,682)	(14,682)	(14,682)	(14,682)	(14,682)			
TOTAL SALES TOTAL PURCHASES	RECS	0	-	-	-	(3,800)	(13,788)	(33,500)	(21,436)	(16,964)	(14,785)	(14,708)	(14,682)	(14,682)	(14,682)	(14,682)	(14,682)	(14,682)	(14,682)	(14,682)	(14,682)	(14,682)		
TOTAL SALES TOTAL PURCHASES	RECS RECS	0	-	-	-	(3,800)	(13,788)	(33,500)	(21,436)	(16,964)	(14,785)	(14,708)			(14,682)	(14,682)	(14,682)	(14,682)				(14,682)	(14,682)	
TOTAL SALES TOTAL PURCHASES	RECS RECS RECS	0				-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	(14,682)	(14,682)	
TOTAL SALES TOTAL PURCHASES	RECS RECS	0	- - - s -			-	-	-	(21,436) - \$ (179,167) \$	-	-	-	0	0	0	0	0	0	0	0	0	(14,682)	(14,682)	
	RECS RECS RECS	0				-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	(14,682)	(14,682)	
TOTAL SALES TOTAL PURCHASES	RECS RECS RECS	0				-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	(14,682)	(14,682)	
TOTAL SALES TOTAL PURCHASES COST / (REVENUE)	RECS RECS RECS	0				\$ (29,067) \$	\$ (108,630)	\$ (271,850)	\$ (179,167) \$	- S (146,046) S	s (131,101) s	\$ (134,332) \$	0 (138,121) \$	0 (142,264) \$	0 (146,532) \$	0 (150,928) \$	(155,456) \$	(160,120) \$	(164,923) \$	0 (169,871) \$	0 (174,967) \$	(14,682) 0 \$ (180,216) \$	(14,682) 0 \$ (185,623)	
TOTAL SALES TOTAL PURCHASES COST / (REVENUE)	RECS RECS RECS	0				\$ (29,067) \$	\$ (108,630) \$	\$ (271,850) \$	\$ (179,167) \$	- \$ (146,046) \$ 2012	\$ (131,101) \$	\$ (134,332) \$	(138,121) \$	(142,264) \$	0 (146,532) \$	(150,928) \$	(155,456) \$	(160,120) \$	(164,923) \$	0 (169,871) \$	0 (174,967) \$	(14,682) 0 \$ (180,216) \$	(14,682) 0 \$ (185,623)	
TOTAL SALES TOTAL PURCHASES COST / (REVENUE)	RECS RECS RECS	0				2012 2,424	- \$ (108,630) \$ 2012 (3,369)	2012 (17,466)	\$ (179,167) \$ 2012 10,965	- 5 (146,046) \$ 2012 15,437	\$ (131,101) \$ 2012 17,616	- \$ (134,332) \$ 2012 17,693	0 (138,121) \$ 2012 17,719	0 (142,264) \$ 2012 17,719	0 (146,532) \$ 2012 17,719	0 (150,928) \$ 2012 17,719	(155,456) \$	(160,120) \$	(164,923) \$	0 (169,871) \$	0 (174,967) \$	(14,682) 0 \$ (180,216) \$	(14,682) 0 \$ (185,623)	
TOTAL SALES TOTAL PURCHASES	RECS RECS RECS	0 0 (280,483) 0				2012 2,424 78,058	2012 (3,369)	2012 (17,466) 127,322	\$ (179,167) \$ 2012 10,965 121,637	2012 15,437 111,365	2012 17,616 105,386	\$ (134,332) \$	0 (138,121) \$ 2012 17,719 97,683	(142,264) \$	0 (146,532) \$	(150,928) \$	(155,456) \$	(160,120) \$	(164,923) \$	0 (169,871) \$	0 (174,967) \$	(14,682) 0 \$ (180,216) \$	(14,682) 0 \$ (185,623)	
TOTAL SALES TOTAL PURCHASES COST / (REVENUE)	RECS RECS RECS	0 0 (280,483) 0				2012 2,424	- \$ (108,630) \$ 2012 (3,369)	2012 (17,466)	\$ (179,167) \$ 2012 10,965	- 5 (146,046) \$ 2012 15,437	\$ (131,101) \$ 2012 17,616	- \$ (134,332) \$ 2012 17,693	0 (138,121) \$ 2012 17,719	0 (142,264) \$ 2012 17,719	0 (146,532) \$ 2012 17,719	0 (150,928) \$ 2012 17,719	0 (155,456) \$ 2012 17,719	0 (160,120) \$ 2012 17,719	0 (164,923) \$ 2012 17,719	0 (169,871) \$ 2012 - 17,719	0   S (174,967) \$ 2012 17,719	(14,682) 0 \$ (180,216) \$ 2012 17,719	(14,682) 0 \$ (185,623) \$ 2012 17,719	
TOTAL SALES TOTAL PURCHASES COST / (REVENUE)	RECS RECS RECS	0 0 (280,483) 0				2012 2,424 78,058	2012 (3,369)	2012 (17,466) 127,322	\$ (179,167) \$ 2012 10,965 121,637	2012 15,437 111,365	2012 17,616 105,386	2012 17,693 101,509	0 (138,121) \$ 2012 17,719 97,683	0 (142,264) \$ 2012 17,719 93,883	0 (146,532) \$ 2012 17,719 90,083	0 (150,928) \$ 2012 17,719 86,283	0 (155,456) \$ 2012 17,719 82,483	0 (160,120) \$ 2012 17,719 78,683	0 (164,923) \$ 2012 17,719 74,883	0 (169,871) \$ 2012 - 17,719 71,083	0 S (174,967) S 2012 17,719 67,283	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483	(14,682) 0 \$ (185,623) \$ 2012 17,719 59,683	
TOTAL SALES TOTAL PURCHASES COST / (REVENUE)	RECS RECS RECS	0 0 (280,483) 0				2012 2,424 78,058 OK	2012 (3,369)	2012 (17,466) 127,322	2012 10,965 121,637 OK	2012 15,437 111,365 OK	2012 17,616 105,386 OK	2012 17,693 101,509 OK	0 (138,121) \$ 2012 17,719 97,683 OK	0 (142,264) \$ 2012 17,719 93,883 OK	0 (146,532) \$ 2012 17,719 90,083 OK	0 (150,928) \$ 2012 17,719 86,283 OK	0 (155,456) \$ 2012 17,719 82,483 OK	0 (160,120) \$ 2012 17,719 78,683 OK	0 (164,923) \$ 2012 17,719 74,883 OK	0 (169,871) \$ 2012 17,719 71,083 OK	0 S (174,967) \$ 2012 17,719 67,283 OK	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK	
TOTAL SALES  TOTAL PURCHASES  COST / (REVENUE)  TOTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS	0 0 (280,483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK	2012 (17,466) 127,322 OK	2012 10,965 121,637 OK	2012 15,437 111,365 OK	2012 17,616 105,386 OK	2012 17,693 101,509 OK	0 (138,121) \$ 2012 17,719 97,683 CK	0 (142,264) \$ 2012 17,719 93,883 OK	0 (146,532) \$ 2012 17,719 90,083 OK	0 (150,928) \$ 2012 17,719 86,283 OK	0 (155,456) \$ 2012 17,719 82,483 OK 32,401	0 (160,120) \$ 2012 17,719 78,683 OK	0 (164,923) \$ 2012 17,719 74,883 CK	0 (169,871) \$ 2012 17,719 71,083 OK	0 \$ (174,967) \$ 2012 17,719 67,283 OK	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 CK	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK	
TOTAL SALES TOTAL PURCHASES  COST / (REVENUE)  TOTAL CROSS CHECK Used + Sold Available	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
OTAL PURCHASES  OTAL PURCHASES  OST / (REVENUE)  OTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK	2012 (17,466) 127,322 OK	2012 10,965 121,637 OK	2012 15,437 111,365 OK	2012 17,616 105,386 OK	2012 17,693 101,509 OK	0 (138,121) \$ 2012 17,719 97,683 CK	0 (142,264) \$ 2012 17,719 93,883 OK	0 (146,532) \$ 2012 17,719 90,083 OK	0 (150,928) \$ 2012 17,719 86,283 OK	0 (155,456) \$ 2012 17,719 82,483 OK 32,401	0 (160,120) \$ 2012 17,719 78,683 OK	0 (164,923) \$ 2012 17,719 74,883 CK	0 (169,871) \$ 2012 17,719 71,083 OK	0 \$ (174,967) \$ 2012 17,719 67,283 OK	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 CK	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK	
OTAL PURCHASES  COST / (REVENUE)  OTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
OTAL PURCHASES  OTAL PURCHASES  OST / (REVENUE)  OTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
OTAL PURCHASES  OTAL PURCHASES  OST / (REVENUE)  OTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
OTAL PURCHASES  COST / (REVENUE)  OTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
OTAL PURCHASES  OTAL PURCHASES  OST / (REVENUE)  OTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
OTAL PURCHASES  OTAL PURCHASES  OST / (REVENUE)  OTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
OTAL PURCHASES  OTAL PURCHASES  OST / (REVENUE)  OTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
OTAL PURCHASES  OTAL PURCHASES  OST / (REVENUE)  OTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
TOTAL SALES  TOTAL PURCHASES  COST / (REVENUE)  TOTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
TOTAL SALES  TOTAL PURCHASES  COST / (REVENUE)  TOTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
TOTAL SALES  TOTAL PURCHASES  COST / (REVENUE)  TOTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
TOTAL SALES  TOTAL PURCHASES  COST / (REVENUE)  TOTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
TOTAL SALES  TOTAL PURCHASES  COST / (REVENUE)  TOTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
OTAL PURCHASES  OTAL PURCHASES  OST / (REVENUE)  OTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
OTAL PURCHASES  COST / (REVENUE)  OTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
OTAL PURCHASES  COST / (REVENUE)  OTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
OTAL PURCHASES  COST / (REVENUE)  OTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
OTAL PURCHASES  OTAL PURCHASES  OST / (REVENUE)  OTAL CROSS CHECK  Used + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
OTAL SALES OTAL PURCHASES  OST / (REVENUE)  DTAL CROSS CHECK Used + Sold Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
TAL SALES TAL PURCHASES  SST / (REVENUE)  TAL CROSS CHECK  Jsed + Sold  Available  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	
TAL SALES TAL PURCHASES  ST / (REVENUE)  TAL CROSS CHECK  JSed + Sold  valiable  Required	RECS RECS RECS S Errors?	0 0 (280.483) 0				2012 2,424 78,058 OK	2012 (3,369) 108,790 OK 10,419 10,419	2012 (17,466) 127,322 OK 16,034 16,034	2012 10,965 121,637 OK 32,401	2012 15,437 111,365 OK 32,401 32,401	2012 17,616 105,386 OK 32,401 32,401	2012 17,693 101,509 OK 32,401 32,401	0 (138,121) \$ 2012 17,719 97,683 OK 32,401 32,401	0 (142,264) \$ 2012 17,719 93,883 OK 32,401 32,401	0 (146,532) \$ 2012 17,719 90,083 OK 32,401 32,401	0 (150,928) \$ 2012 17,719 86,283 OK 32,401 32,401	0 (155,456) \$ 2012 17,719 82,483 OK 32,401 32,401	0 (160,120) \$ 2012 17,719 78,683 OK 32,401 32,401	0 (164,923) \$ 2012 17,719 74,883 OK 32,401 32,401	0 (169,871) \$ 2012 17,719 71,083 OK 32,401 32,401	0 \$ (174,967) \$ 2012 17,719 67,283 CK 32,401 32,401	(14,682) 0 \$ (180,216) \$ 2012 17,719 63,483 OK 32,401 32,401	(14,682) 0 \$ (185,623) 2012 17,719 59,683 OK 32,401 32,401	