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April 1, 2014



Dr. Burl Haar
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

Mr. William Grant
Deputy Commissioner
Minnesota Department of Commerce
Division of Energy Resources
85 7th Place East, Suite 500
St. Paul, Minnesota 55101-2198

**RE: 2013 Demand Side Management Financial Incentive Project
Docket No. E017/M-14-201**

**Annual Filing to Update the Conservation Improvement Project Rider
Docket No. E017/M-14-201**

**2013 Conservation Improvement Project Status Report
Docket No. E017/CIP-10-356.03**

Dear Dr. Haar and Deputy Commissioner Grant:

Enclosed please find Otter Tail Power Company's filing in the above referenced matter which includes:

- Executive Summary
- Summary of Filing
- Petition of Otter Tail Power Company
- Financial Incentive
- Status Report
- Conservation Cost Recovery Adjustment
- Appendix A – Tables
- Appendix B – Third Party Evaluations
- Appendix C – Project Information Sheets

A Certificate of Service is also enclosed. Otter Tail Power Company has served a copy of this filing on all parties listed on the enclosed Service List. If you or Commission Staff have any questions, please contact me at (218) 739-8303 or KPederson@otpc.com.

Very truly yours,

/s/ KIM PEDERSON
Kim Pederson, Manager
Market Planning

Enclosures
By electronic filing
c: Service List

2013 DSM INCENTIVE, FILING TO UPDATE THE RIDER, AND STATUS REPORT EXECUTIVE SUMMARY

On April 1, 2014, Otter Tail Power Company (“Otter Tail”, “Company”) filed with the Minnesota Public Utilities Commission (“Commission”, “PUC”) and the Minnesota Division of Energy Resources (“DER”) its annual filing of the Demand Side Management (“DSM”) Financial Mechanism. The Company is requesting Commission approval of its shared savings incentive of \$4,026,600 for 2013.

On April 1, 2014, Otter Tail Power Company filed its 2013 Status Report.

On April 1, 2014, Otter Tail also filed its annual filing to update the Conservation Improvement Project (“CIP”) Rider.

Otter Tail would like to emphasize the following points concerning the 2013 Conservation Improvement Program:

- The Company achieved 1.67¹ percent energy savings as a percent of retail energy sales, above our approved goal of 1.23 percent.
- The Company achieved energy savings of 35,792,002 kWh, exceeding goal by 136 percent. Demand savings were 111 percent of goal.
- The cost per kWh for *first year* savings is \$0.15 (15 cents) compared to a budgeted cost of \$0.20² (20 cents). Costs are in line with historical averages of \$0.15.
- Expenditures were on budget (101%) at \$5,253,935 based on an approved budget of \$5,221,400.
- Net benefits of \$32,764,856 were achieved.

Requests for Approval

- The Company is requesting approval for \$4,026,600 in performance incentives for 2013 CIP activities, a small share of the total net benefits from investments in CIP.
- The Company is requesting the Conservation Cost Recovery Adjustment (“CCRA”)

¹ Adjusted for one-third energy savings from behavioral change programs.

factor of \$0.00209 per kWh be reflected on customers' bills through the Resource Adjustment starting with bills rendered (dated) on and after July 1, 2014.

- As in prior years, Otter Tail is requesting a variance to Minnesota Rule 7820.3500 (E & K), which require that the Fuel Clause Adjustment (“FCA”) be stated as a separate line item on customer bills. The requested variance would allow the Company to continue to combine the FCA with the CCRA on customer bills.
- The Company is requesting approval of the 2013 CIP Tracker, resulting in a year-end balance of \$4,835,558.

The financial incentive mechanism in Minnesota has been effective at motivating the utility to achieve energy savings and to do so at a low cost. Otter Tail has committed resources and developed new, creative approaches in pursuit of higher conservation goals.

This pursuit includes an appropriate balance of direct and indirect impact programs. New technologies, delivery mechanisms, and segmentation strategies emphasize Otter Tail’s commitment to energy efficiency. Recent accomplishments are particularly noteworthy in the face of new building codes and equipment efficiencies, and saturated markets. A consistent regulatory environment coupled with fair incentives that keep energy efficiency on par with supply side investments is critical to overcoming these challenges as utilities pursue Minnesota’s Next Generation Act energy goals. Otter Tail appreciates the support from Minnesota’s regulatory agencies as we work together to sustain Minnesota’s energy future.

Please note that this filing is available through the eDockets system maintained by the Minnesota Department of Commerce and the Minnesota Public Utilities Commission. Access this document by going to eDockets through the websites of the Department of Commerce or the Public Utilities Commission or going to the eDockets homepage at:

<https://www.edockets.state.mn.us/EFiling/home.jsp>

Once on the eDockets homepage, this document can be accessed through the Search Documents link and entering in docket numbers: 14-201 or 10-356.03

Please contact Otter Tail at 800-493-3299 to request a complete copy of this filing.

² Budgeted cost per kWh includes December 18, 2013 budget modification increase of \$990,378.

**STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION**

In the Matter of Otter Tail Power
Company's Annual Filing of the
Demand Side Management
Financial Incentive Project

Docket No. E017/M-14-201

In the Matter of Otter Tail Power
Company's Annual Filing to
Update the Conservation
Improvement Project Rider

Docket No. E017/M-14-201

Status Report – 2013 CIP Activities

Docket No. E017/CIP-10-356.03

SUMMARY OF FILING

Otter Tail Power Company (“Otter Tail”) is requesting approval of a financial incentive of \$4,026,600 to be approved and recovered through its Conservation Improvement Project (“CIP”) Tracker Account.

Otter Tail is requesting the Conservation Cost Recovery Adjustment (“CCRA”) factor of \$0.00209 per kWh be reflected on customers' bills through the Resource Adjustment starting with bills rendered (dated) on and after July 1, 2014.

As in prior years, Otter Tail is requesting a variance to Minnesota Rule 7820.3500 (G & K), which require that the Fuel Clause Adjustment (“FCA”) be stated as a separate line item on customer bills. The requested variance would allow the Company to continue to combine the FCA with the CCRA on customer bills.

Lastly, Otter Tail is requesting approval of the 2013 CIP Tracker, resulting in a year-end 2013 balance of \$4,835,558.

**STATE OF MINNESOTA
BEFORE THE
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In the Matter of Otter Tail Power
Company's Annual Filing of the
Demand Side Management
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Company's Annual Filing to
Update the Conservation
Improvement Project Rider

Docket No. E017/M-14-201

Status Report – 2013 CIP Activities

Docket No. E017/CIP-10-356.03

PETITION OF OTTER TAIL POWER COMPANY

I. INTRODUCTION AND BACKGROUND

Otter Tail Power Company (“Otter Tail”, “Company”) is requesting approval of a financial incentive of \$4,026,600 to be approved and recovered through its Conservation Improvement Project (“CIP”) Tracker Account.

Otter Tail is requesting the Conservation Cost Recovery Adjustment (“CCRA”) factor of \$0.00209 per kWh be reflected on customers' bills through the Resource Adjustment starting with bills rendered (dated) on and after July 1, 2014.

As in prior years, Otter Tail is requesting a variance to Minnesota Rule 7820.3500 (G & K), which require that the Fuel Clause Adjustment (“FCA”) be stated as a separate line item on customer bills. The requested variance would allow the Company to continue to combine the FCA with the CCRA on customer bills.

Lastly, Otter Tail is requesting approval of the 2013 CIP Tracker, resulting in a year-end 2013 balance of \$4,835,558.

On June 15, 1994, Otter Tail filed a petition for a CIP Adjustment to recover costs associated with CIP. On October 18, 1994, the Company filed a Motion to File Amended Petition and Accept Settlement Agreement. On December 23, 1994, the Minnesota Public

Utilities Commission (“Commission”, “PUC”) issued an Order Approving Settlement and Proposed CIP Adjustment for Otter Tail.³ In this Order, the Commission approved a CIP adjustment mechanism to be applied to customers' bills on or after July 1, 1995, which the Company began implementing on July 1, 1995.

On January 27, 2010, the PUC approved a new shared savings model⁴ for 2010 and indicated the new shared savings Demand Side Management (“DSM”) incentive shall be in operation for the length of each utility's triennial CIP plan. Otter Tail’s triennial plan is approved for 2011-2013.

On March 30, 2012, the PUC approved the removal of the non-linear adjustment from the shared savings DSM financial incentive effective with energy savings achievements in 2012 for all natural gas and electric utilities

On April 26, 2012, the PUC approved application of the Average Savings Method (“ASM”) be applied for counting behavioral project savings with a three-year minimum lifetime, effective with the 2013 program year.

On February 1, 2013, Otter Tail filed its Financial Incentive Proposal Compliance Filing which included 2013 approved budgets, goals, net benefits, and resulting incentive levels with the PUC and the Division of Energy Resources (“DER”). The filing establishes the 2013 incentive at approved goal. On August 6, 2013 the DER issued a Decision approving the 2013 Compliance Filing.

II. REQUEST FOR APPROVAL

Financial Incentive Filing

Otter Tail respectfully requests that a financial incentive of \$4,026,600 be approved and recovered through its CIP Tracker Account.

Details of the incentive calculation and corresponding evaluations of direct impact projects are included in the attached report under the Section entitled "FINANCIAL INCENTIVE."

Conservation Improvement Project Rider

The Company is requesting the Conservation Cost Recovery Adjustment factor of

³ Docket No. E017/M-94-539

⁴ Docket E,G999/CIP-08-133

\$0.00209 be reflected on customers' bills through the Resource Adjustment starting with bills rendered (dated) on and after July 1, 2014.

III. LEGAL AUTHORITY

The Petition for approval of Otter Tail's Financial Incentive Filing is submitted in accordance with Minn. Stat. 216B.16, subd. 6c. The Conservation Improvement Project Rider is submitted in accordance with the Miscellaneous Tariff rules.

IV. REQUEST FOR VARIANCE TO MINNESOTA RULES

Otter Tail requests a variance to Minnesota Rules 7820.3500 (G & K), which require that the FCA be stated as a separate line item on customers' bills. The requested variance would allow the Company to continue to combine the FCA with the Conservation Improvement Adjustment on customer bills.

Minnesota Rules 7829.3200 authorizes the Commission to grant a variance to its rules when (1) enforcement of the rule would impose an excessive burden on the applicant, (2) the variance would not adversely affect the public interest, and (3) the variance would not conflict with standards imposed by law. Otter Tail believes the criteria for granting variances are met since the Company has been using the combined Resource Adjustment since July 1995, and customers have become familiar with the single-line item on their bill.

The continuation of the variance would not adversely affect the public interest and may avoid customer confusion if the bill presentment was altered at this time.

And finally, there are no statutory provisions that would prohibit the variance; therefore, the requirement may be varied pursuant to Minnesota rules 7829.3200.

Once approved by the Commission, the Company will be notifying its Minnesota customers of the new CIP surcharge directly on its customers' bills. A surcharge notification will be printed on the back of each bill on the billing date following closest to July 1, 2014. In general, the notification will state "Beginning July 1, the Resource Adjustment includes a CCRA factor of \$0.00209/kWh that has been applied based on the Commission's (date) order."

V. MISCELLANEOUS FILING AND REGULATORY REQUIREMENTS

- A. All correspondence with respect to this filing should be sent to:
- Kim Pederson
Otter Tail Power Company
215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56538-0496
(218) 739-8303 Phone
(218) 739-8941 FAX
- B. The effective date of the CIP Rider is July 1, 2014. The effective date of the other filings is the date of Commission approval.
- C. Otter Tail Power Company agrees that the notice and comment periods set forth in
- the Miscellaneous Tariff Filing rules control the time frame for processing this type of filing.
- D. The reason for the filing and its impacts is explained above and in the attached report.
- E. Minnesota Rules ch. 7690 contains the requirements and procedures for CIP filings. Minnesota Statutes section 216B.2401, 216B.241, and 216B.2411 contain provisions utilities must meet in CIP. All compliance points are addressed in this section.

Statutory Requirements

2013 Minimum Spending Requirement

Minn. Statute 216B.241, requires that 1.5 percent of the Company's electric gross operating revenues be spent on CIP. Otter Tail's spending in relation to approved minimum spending is as follows:

Minimum Spending Requirement	\$2,077,546
Approved Budget*	\$5,221,400
2013 Actual Spending	\$5,253,935

*includes approved budget modifications

2013 Minimum Energy Savings Goal

The Company has complied with Minn. Statute 216B.241 which sets the minimum energy savings goal of one percent of MWh sales, determined as a percent of 2007-2009 weather normalized sales.

Energy savings goal @ 1%	21,423,542 kWh
Approved Energy Savings Goal	26,322,711 kWh
2013 Actual Energy Savings Goal	35,792,002 kWh

2013 Low-Income Spending Requirement

The Company has complied with Minn. Statute 216B.241, subd. 7 requiring utilities to spend 0.2 percent of residential electric gross operating revenues on low-income programs.

Low-income minimum spend @ .2%	\$ 86,721
Low-income approved budget	\$150,000
Low-income actual spend	\$142,054

2013 Research and Development 10 Percent spending cap

The Company has complied with Minn. Statute 216B.241, subd. 2c that limits spending on Research and Development to 10 percent of the minimum spending requirement.

Distributed Energy Resource Five Percent spending cap

The Company has complied with Minn. Statute 216B.241, subd. 1(a) that allows utilities to spend up to five percent of the utility's minimum spending requirement on distributed generation project.

Lighting Use and Recycling Programs

The Company has complied with Minn. Statute 216B.241 that requires utilities to invest in projects that encourage the use of energy efficient lighting and reclamation and recycling of spent fluorescent and high intensity discharge lamps. Otter Tail met this requirement through its commercial and residential lighting programs.

Triennial Decision Requirements

The Company has complied with following additional requirements established in the DER Deputy Commissioner's Decision on November 22, 2010:

- Collect and track pre-existing heating system types, primary and secondary, in participating homes and businesses in the Residential and Commercial Air Source and Ground Source Heat Pump programs; and
 - Screen rebate applications to ensure that rebates are not paid to customers with natural gas-based primary heating systems.
- Revise the Motor program in 2012 and 2013 eliminating rebates for NEMA Premium efficiency motors below 200 hp in new or replace-on-failure applications.
- Provide analysis of alternate methodologies for estimating saving achieved per home under the Home Insulation program beginning in the 2012 program year.
- Offer Sustainable Buildings 2030-specific services through its existing programs.

Budget Modifications

On July 27, 2011 the Deputy Commissioner of the DER issued an Order giving utilities budget flexibility criteria by segment rather than individual program budgets. Under this new requirement utilities were required to provide a letter for permission to exceed the overall budget for a segment by 25 percent or more. On December 6, 2013, Otter Tail filed a request to exceed the 25 percent budget flexibility in its 2013 Commercial and Industrial Sector. On December 18, 2013, the Deputy Commissioner approved Otter Tail's budget modification request, increasing the overall sector budget to \$3,389,000.

Measurement and Verification (M & V) Protocols for Large Custom CIP Projects.

On July 23, 2008, the Deputy Commissioner approved M & V Protocols for Large Custom CIP Projects. The protocols apply to custom projects that have savings greater than one GWh and are initiated after April 1, 2008.

In 2012 Otter Tail had one Custom Grant application estimated to save greater than one GWH. Otter Tail filed the project's M & V plan with the DER and received approval of the plan and estimated energy savings. Otter Tail claimed 50 percent of the projected annual energy savings in 2012 and the remainder of the savings in 2013. Half of the customer rebate was paid

in 2012 and the remaining half was paid in December 2013. Measurement and verification of the project was completed in December of 2013. A full report according to the M & V Protocols was provided to the DER for review on February 26, 2014. In March 2014 the DER Staff approved that the project's rebate amounts paid, energy savings, demand savings, and customer cost savings.

CIP Employee Related Expenses

In its November 5, 2010 Order in Docket No. E017/M-10-220, the Commission agreed with and adopted the recommendations of the DER regarding reporting of employee expenses in utility status reports. The DER's recommendation included guidelines for public utilities to report employee related expenses that have been charged as Conservation Improvement Program ("CIP") expenses. Public utilities must clearly identify all expenses in the four sections below:

- Travel expenses
- Employee meals;
- Entertainment expenses, and
- Employee awards.

The DER further recommended, *"to limit the impacts on ratepayers, that these types of expenses remain a minor part of the overall annual budget or expenses, with a cap of 0.5 percent of total annual budgets or expenses."*

Otter Tail Power summarizes the Company's 2013 employee expenses as follows:

Section	Amount	Description
Travel Expense	\$29,207.60	Travel expenses include mileage, rental vehicles, taxi services, and air fare for offsite meetings, customer site visits, and travel to training and conferences. All travel expenses are directly related to CIP program design, training, delivery, and promotion.
Lodging Expenses	\$6,502.10	Lodging expenses include any lodging used for customer site offsite meetings, customer site visits, and lodging for training and conferences. All lodging expenses are directly related to CIP program design, training, delivery, and promotion.
Meal and Entertainment Expenses	\$4,218.35	Meal and entertainment expenses include employee meals while attending offsite meetings, and meals while attending training and conferences. All meal and entertainment expenses are directly related to CIP program design, training, delivery, promotion, and review.
Employee Awards	\$0.00	The CIP Tracker does not include any employee awards.
TOTAL	\$39,928.05	

Total 2013 employee expenses that were included in OTP's CIP Tracker were \$39,928. The total employee expense is 0.76 percent of the total 2013 CIP Tracker expenses of \$5,253,935.

OTP's total employee expense exceeds the DER recommended employee expense of 0.5 percent of total CIP expenses by \$13,658.38. OTP believes the recommended cap of 0.5 percent of CIP expenses is not reasonable when considering the 153 communities spread across 25,700 square miles of Minnesota service territory. Customers are not clustered in metro areas. In addition, stakeholder meetings, Commission hearings, and regulatory consultation all typically occur in the Minneapolis/St. Paul area. OTP employees often times travel hundreds of miles a day for the development and promotion of CIP. OTP respectfully asks the DER to consider these circumstances when reviewing OTP's employee expenses.

Incorporation of the Average Savings Method (ASM) to account for Behavioral Savings.

On April 26, 2012, in Docket Nos. E,G999/CI-08-133 and E017/CIP-10-356, the Deputy Commissioner of the Department of Commerce made a decision in how to count energy savings from behavioral projects in CIP programs and the Shared Savings Demand-Side Management Financial Incentive calculations. The Commissioner ordered the following points that pertain to Otter Tail:

- The Average Savings Method (ASM) proposed by Staff is approved with a three-year minimum lifetime, effective with the 2013 program year. The specific timing that utilities must apply the ASM is shown below.

Utility Group	Status Reports	Plans
MP and Otter Tail	Apply ASM beginning with 2013 status reports.	Apply ASM to 2014-2016 triennial plans.

- This Decision is effective through December 31, 2015 for all utilities except MP and OTP unless modified by the Deputy Commissioner. For MP and Otter Tail, this order is effective through December 31, 2016 unless modified by the Deputy Commissioner.

Otter Tail has implemented the Deputy Commissioner's decision for calculating the energy savings for behavioral projects. The results have been incorporated in both the energy savings results counted towards the 1.5% energy savings goal and the Financial Incentive calculation.

VI. CONCLUSION

Based on information provided throughout this filing, Otter Tail requests the following:

From the PUC:

- Approval of the 2013 DSM Financial Incentive, totaling \$4,026,600.
- Approval of the 2013 CIP Tracker, resulting in a year-end balance of \$4,835,558
- Approval to implement the CCRA factor of \$0.00209/kwh reflected on customers' bills through the Resource Adjustment starting with bills rendered on and after July 1, 2014.
- Approval of a variance to Minnesota Rule 7820.3500 to allow Otter Tail to continue to combine the FCA with the Conservation Improvement Adjustment on customer bills.

From the Division of Energy Resources:

- Approval of the individual 2013 CIP Projects, Evaluations, Energy and Demand Savings
- Approval of Otter Tail's response to various DER orders as indicated in the Miscellaneous Filing and Regulatory Compliance section of this filing.

If there are any questions concerning this filing, please contact Kim Pederson at (218) 739-8303 or KPederson@otpc.com.

Dated: April 1, 2014

Respectfully submitted,

OTTER TAIL POWER COMPANY

By: /s/ KIM PEDERSON

Kim Pederson
Manager, Market Planning
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Financial Incentive

FINANCIAL INCENTIVE

Otter Tail Power Company (“Company”, “Otter Tail”) hereby submits this filing in compliance with the Minnesota Public Utilities Commission's (“Commission”, “PUC”) January 27, 2010 Order Approving Demand Side Management (“DSM”) Financial Incentive Plans.¹

The filing consists of the following items.

- I. Discussion of 2013 Financial Incentive
- II. Financial Incentive - Statutory Criteria
- III. Cost Comparisons / Net Benefits
- IV. Request for Approval

Tables referenced in this Financial Incentive are located in Appendix A and include the following information.

Table 1	Calculation of Carrying Charge – 2013 CIP Tracker
Table 2A	2013 Incentive Mechanism – Pre-Year Inputs
Table 2B	2013 Incentive Mechanism – Post-Year Results
Table 3	2013 Project Costs, Savings, and Benefits
Table 4	2013 Benefit Cost Ratios
Table 5	2013 CIP Program Status Report
Table 6	2013 CIP Program Status Report – Costs per kW & per kWh

¹ Docket Numbers E,G999/CI-08-133

I. DISCUSSION OF 2013 FINANCIAL INCENTIVE

The current shared-savings financial incentive plan awards Otter Tail Power Company a small share of the net benefits from investments in energy efficiency. The new plan links the incentive to the utilities' performance in achieving cost-effective energy efficiency.

INCENTIVE CALCULATION

On January 27, 2010, the Minnesota PUC approved a new shared savings model² for 2010 and indicated the new shared savings DSM incentive shall be in operation for the length of each utility's triennial Conservation Improvement Project ("CIP") plan. Otter Tail's triennial plan is approved for 2011-2013.

On March 30, 2012, the PUC approved the removal of the non-linear adjustment from the shared savings DSM financial incentive effective with energy savings achievements in 2012 for all natural gas and electric utilities.

On April 26, 2012, the PUC approved application of the Average Savings Method (ASM) be applied for counting behavioral project savings with a three-year minimum lifetime, effective with the 2013 program year.

On February 1, 2013, Otter Tail filed its Financial Incentive Proposal Compliance Filing which included 2013 approved budgets, goals, net benefits, and resulting incentive levels with the Minnesota PUC and the Department of Commerce ("Department"). The filing establishes the 2013 incentive at approved goal. On August 6, 2013 the Department issued a Decision approving the 2013 Compliance Filing.

As part of this April 1, 2014 filing under section II, the Company is providing the 2013 proposed incentive. The following steps are used in the incentive calculation:

² Docket E,G999/CIP-08-133

1. The 2013 incentive is calculated using the model provided by the Department and detailed in Appendix A, Tables 2A and 2B. The kWh earnings threshold is set at 50 percent of the utility's average energy savings over the years 2004-2008, removing both the maximum and minimum achievements, or at energy savings equal to 0.4 percent of retail sales, whichever is lower.
2. The resulting 2013 energy saving model is calibrated at 21,423,542 kWh, which is one percent of the Company's average three-year, weather normalized retail sales. This goal is used in the calculation of the incentive only. Otter Tail's 2013 CIP approved energy goal is still 31,738,044 kWh as shown in Appendix A, Table 2, based on the DER's April 11, 2011 approval of Otter Tail's 2011–2013 CIP plan.
3. As outlined in Appendix A, Table 2A, the incentive calibration establishes that the Company will receive a linear multiplier of 0.00936 for every 0.1 percent of sales saved above the zero point. Appendix A, Table 2B provides the results of the financial incentive calculation, showing the Company achieved roughly 14.71 steps of "0.1 percent of sales saved" above the zero point. (14.71 x .00936 multiplier = 13.76 percent multiplier of 2013 net benefits.)
4. At year-end, the utility calculates the net benefits for the CIP projects based on actual participation and costs. The net benefits are the avoided costs less the total CIP costs, including both direct and indirect projects.
5. Appendix A, Table 3 lists the 2013 CIP Projects, each as proposed and approved by the Department, and each with actual 2013 results. Also listed are total project costs, resulting benefits, and net benefits for each project and as a total CIP Program.
6. **Actual energy savings was 35,792,002 kWh, or 1.67 percent of historic average retail sales, and total net benefits are calculated to be \$32,764,856.** The 2013 results for energy savings, costs, and net benefits are entered in the post-year financial incentive tool as shown in Appendix A, Table 2B.
7. Appendix A, Table 4 outlines the benefit/cost ratios for each 2013 CIP Project. Figures are listed for each project "as filed" as part of the 2011-2013 CIP Triennial Filing and "as actual" reflecting 2013 actual participation, savings, and costs.
 - a. Table 4 includes the approved Air Conditioning Control program for

commercial customers. This program was approved by the DER on July 10, 2012 as a modification to Otter Tail's Triennial plan.

- b. "As filed" benefit/cost ratios do not reflect the approved budget modification³.
8. As detailed in Appendix A, Table 2B and based on the corresponding percentage of net benefits (13.76%), the total incentive amount requested is **\$4,026,600**.

II. FINANCIAL INCENTIVE - STATUTORY CRITERIA

Minn. Stat. §216B.16, subd. 6c(b), sets forth four statutory criteria with respect to approval by the Minnesota Public Utilities Commission of utility financial incentive plans for energy conservation improvements. In approving incentive plans, the Commission shall consider:

- (1) whether the plan is likely to increase utility investments in cost-effective energy conservation.
- (2) whether the plan is compatible with the interest of utility ratepayers and other interested parties.
- (3) whether the plan links the incentive to the utility's performance in achieving cost-effective conservation.
- (4) whether the plan is in conflict with other provisions of this chapter.

Consistent with the Commission's January 27, 2010 Order Approving Demand Side Management Financial Incentive Plans in Docket No. E,G999/CI-08-133, the following discussion describes how Otter Tail's proposed 2013 Demand Side Management financial incentive in the present docket is consistent with each of these statutory criteria.

Otter Tail's financial incentive mechanism is consistent with the considerations set forth by the Commission as follows:

1. Increase investments: The incentive mechanism encourages increased utility

³ Docket No. E017/CIP-10-356, December 18, 2013 Order approving a budget modification of \$3,389,000 for the C & I sector.

investment in cost-effective conservation, recognizing higher incentives for greater energy savings. The increasing increments of the incentive motivate utilities to exceed savings achievable at statutory spending levels. The current incentive focuses on energy savings goals, rather than spending.

2. Interest of ratepayers and others: The current mechanism is in the interest of ratepayers because it awards utilities a small percentage of net benefits achieved. The mechanism does not award the incentives for simply complying with statutory spending, but encourages additional cost-effective energy-efficiency investment, which is in the ratepayer's interest.
3. Links incentive to performance: The current incentive is a shared savings mechanism that awards utilities a share of the total utility benefits from investments in energy efficiency. There is a direct link between the amount of the incentive and the utility's performance of achieving cost-effective efficiency. As cost-effectiveness increases, net benefits increase, and thus, the incentive increases. Therefore, the mechanism is directly linked to cost-effective performance.
4. Conflict with other provisions: Otter Tail does not believe the current incentive conflicts with other provisions of law. It does not result in unjust or unreasonable rates since the mechanism awards for cost effective energy efficiency at a cost less than supply side options.

Otter Tail's financial incentive mechanism is consistent with the Deputy Commissioner's April 26, 2012 decision in docket nos. E,G999/CI-08-133 and E017/CIP-10-356, on implementing the Average Savings Method in counting savings from Behavioral projects.

III. COST COMPARISONS / NET BENEFITS

In 2013, Otter Tail's average first year cost per kWh saved was 15 cents, which is on par with the six-year average of 15 cents. As noted in the Table 1, the average first year costs per kWh range have remained relatively consistent with the exception of 2009 when significant custom grant savings occurred.

Table 1: History of Otter Tail's CIP Achievements, Tracker, and Incentives (2008-2013)						
	2008	2009	2010	2011	2012	2013
DSM Financial Incentive	\$273,798	\$1,101,060	\$3,531,538	\$2,608,094	\$2,681,575	\$4,026,600
CIP Expenditures	\$2,345,874	\$4,093,050	\$4,984,050	\$4,344,581	\$4,816,994	\$5,253,935
Achieved Energy Savings (kWh)	15,994,719	35,706,319	31,792,750	27,957,635	30,793,654	35,792,002
Average Cost per kWh Saved	\$0.15	\$0.11	\$0.16	\$0.16	\$0.16	\$0.15

NET BENEFITS

The definition of “net benefits” used in the financial incentive calculation is the total utility benefits less the total utility costs for the entire CIP portfolio for a single year. These figures are derived from a single year (2013) benefit/cost analysis using DSM^{More}™ software. The utility benefits are aggregated for the lifetime of all CIP energy efficiency measures, discounted back to 2013 dollars using the utility discount rate of 8.00 percent, which was filed and approved in the 2011-2013 CIP filing.

As shown in Table 3 of Appendix A, the estimated net benefits for the 2013 Proposed CIP are \$22,532,844. Additional details of the total costs and the total benefits from benefit/cost analysis of the 2013 Proposed CIP portfolio include:

Program Costs - Proposed 2013	
Delivery / Implementation / Administration Costs	\$2,391,733
Incentives	\$1,839,289
DER's Dec. 18, 2013 budget modification approval	\$990,378
Total Costs**	\$5,221,400
Program Benefits - Proposed 2013*	
Avoided T&D Electric	\$5,443,460
Cost-Based Avoided Electric Production	\$17,472,962
Cost-Based Avoided Electric Capacity	\$4,837,822
Total Benefits**	\$27,754,244
Net Benefits - Proposed 2013	\$22,532,844
Benefit / Cost Results - Proposed 2013	5.32

* Benefits are based on lifetime benefits, discounted back to 2013 dollars using 8.0 percent utility discount rate.

**DER's July 10, 2012 approval of costs and benefits for Commercial AC control pilot are included, but are not considered an input into the 2013 Financial Incentive mechanism. Next Generation Energy Act (“NGEA”) and PUC assessments were budgeted for and are included in the financial incentive calculation.

As shown in Table 3 of Appendix A, the actual net benefits of \$32,764,856 for 2013 CIP are higher than the proposed net benefits. Additional details of the total costs and the total benefits from the DSMore analysis of the 2013 Actual CIP portfolio include:

Program Costs - Actual 2013**	
Delivery / Implementation / Administration Costs	\$2,369,780
Incentives	\$2,884,155
Total Costs**	\$5,253,935
Program Benefits - Actual 2013* **	
Avoided T&D Electric	\$6,800,152
Cost-Based Avoided Electric Production	\$25,289,061
Cost-Based Avoided Electric Capacity	\$5,929,578
Total Benefits **	\$38,018,791
Net Benefits - Proposed 2013**	\$32,764,856
Benefit / Cost Results - Proposed 2013	7.24

*Benefits are based on lifetime benefits, discounted back to 2013 dollars using 8.0 percent utility discount rate.

CIP COST BREAKDOWN - 2013				
	Proposed Costs		Actual Costs	
Delivery	\$2,391,733	46%	\$2,369,780	45%
Incentives	\$1,839,289	35%	\$2,884,155	55%
Budget Modification	\$990,378	19%		
Total CIP Costs	\$5,221,400		\$5,253,935	

* DER's July 10, 2012 approval of costs and benefits for Commercial AC control pilot are included, but are not considered an input into the 2013 Financial Incentive mechanism.

IV. REQUEST FOR APPROVAL

Financial Incentive Filing

- Otter Tail respectfully requests that an incentive of \$4,026,600 be recoverable through its CIP Tracker Account;
- Otter Tail is requesting that the Conservation Cost Recovery Adjustment factor based on the Commission's determination of appropriate calculation methodology be reflected on customers' bills through the Resource Adjustment starting with bills rendered (dated) on and after July 1, 2014.
- Otter Tail is requesting a variance to Minnesota Rules to allow the Company to

continue to combine the Fuel Clause Adjustment with the Conservation Improvement Adjustment on customer bills.

If there are any questions concerning this filing, please contact Kim Pederson at (218)739-8303 or KPederson@otpc.com.

Dated: April 1, 2014

Respectfully submitted,
OTTER TAIL POWER COMPANY

By: /s/ KIM PEDERSON

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Status Report

Status Report

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STATUS REPORT - 2013 CIP PROJECTS

The 2013 Conservation Improvement Project (“CIP”) Status Report has been combined with the 2013 Financial Incentive Filing, produced annually on April 1. The Status Report covers all 2013 programs, including direct impact, indirect impact, and miscellaneous programs. Participation, program costs, and energy and demand savings for all programs are outlined in Appendix A, Table 5.

Direct Impact Projects

Residential

- Air Conditioning Control
- Air Source Heat Pumps
- Appliance Recycling
- Be Bright
- Energy Feedback
- Geothermal Heat Pumps
- Home Insulation
- Residential Demand Control

Commercial

- Adjustable Speed Drives
- Air Conditioning Control - Pilot
- Air Source Heat Pumps
- Business Education
- Commercial Design Assistance
- Geothermal Heat Pumps
- Grants
- Lighting – Retrofits
- Lighting – New Construction
- Motors
- Plan Review
- Refrigeration

Low-Income

- House Therapy

Indirect Impact Projects / Regulatory Requirements

- Advertising & Education
- Compressed Air Audits
- Financing
- Implementation & Training
- Program Development
- PUC Assessments / Regulatory (NGEA) Assessments

Miscellaneous / Inactive Program Costs

- Accounting Adjustments
- Town Energy Challenge Pilot

DIRECT IMPACT – RESIDENTIAL

AIR CONDITIONING CONTROL

The Cool Savings air conditioning control program targets residential customers with central air conditioning. Customers are encouraged to enroll in the program and receive a \$7/month credit for each of the 4 summer months (June-September).

Otter Tail Power Company (“the Company”, “Otter Tail”) promotes air conditioning control using various resources listed below:

- Bill inserts sent in February, March and July of 2013
- Television and radio campaign conducted in conjunction with the Advertising and Education program.
- Customer care booklet that is sent to all new customers
- Flash Ad at www.otpc.com home page
- Pocket calendar and products and services guide
- Presentations and literature distribution at workshops
- Annual and monthly service rep training
- During House Therapy training
- Brochures available in customer service center lobbies and by request
- Inclusion as appropriate on Home Energy Reports mailed to customers through the Energy Feedback program.
- Program, rate, and rebates described within the Company’s web site at www.otpc.com

In 2013, Otter Tail controlled air conditioning 25 days totaling 56 hours and 30 minutes. This control time is within the 300-hour control limit in the air conditioning rider.

This Program has been approved for continuation in the 2014 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
AIR CONDITIONING CONTROL (R)	Actual	Proposed	% of Goal
Participation	101	75	135%
Budget \$	\$55,313	\$37,500	148%

Evaluation Methodology

In prior years, a process evaluation was performed for the Air Conditioning Control Project. Customers were surveyed about any affects in their homes from cycling the air conditioning units, the reasons behind their participation in the project, and the installation process itself.

Energy Savings & Adjustments

Technical resource figures are currently not available for air conditioning cycling. Based on prior-year evaluations, the Company recognizes air conditioning control energy savings of approximately 45.4 kWh per participant. The project also affects summer demand – each household reducing demand by nearly 1 kW per unit.

ENERGY AND DEMAND RESULTS – 2013	
AIR CONDITIONING CONTROL (R)	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	4,929
Demand Savings – kW	97.72

AIR SOURCE HEAT PUMPS

(Residential)

The Air Source Heat Pump Program targets residential customers currently using or considering the installation of less efficient resistance electric heating and cooling systems by offering rebates for high-efficiency air source heat pumps. For 2013, Otter Tail again relied on Energy Star qualifications as the minimum equipment efficiency requirement for this program. This Program is included in the 2014 CIP with efficiency requirements that match the minimum Energy Star requirements below:

Energy Star – ASHP	HSPF	SEER	EER
Split System	> or = 8.2	> or = 14.5	12.0
Package Terminal			> or = 11.0

Otter Tail promotes energy efficient heat pumps using various resources listed below:

- *Taking Care of Business* commercial CIP brochure
- *Guide to programs and services* sent to contractors
- Brochures available in customer service center lobbies and by request
- Print advertisement to regional home owners in *Lake & Home Magazine*
- Presentations and literature distribution at Builder and Electrical Workshops for contractors
- Bill messages included on all customer statements
- Bill inserts about heat pump efficiency, financing, and rebates
- Training material covered with service representatives in annual and monthly training
- Program, rate, and rebates described within the Company's web site at www.otpc.com

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
AIR SOURCE HEAT PUMPS (R)	Actual	Proposed	% of Goal
Participation	105	145	72%
Budget \$	\$85,573	\$113,000	76%

Evaluation Methodology

Engineering estimates are used to determine energy savings from each air source heat pump system installed. The Technical Resource Manual lists air source heat pumps with cooling efficiencies only, whereas Otter Tail claims cooling savings and heating savings with the air source systems.

Energy Savings & Adjustments

For 2013, Otter Tail recognizes 7,794 kilowatt-hours of energy savings at the generator, based on an actual installed average size residential air source unit of almost 2.3 tons, including both summer cooling and winter shoulder-heating savings. Demand savings are approximately 0.57 kW per unit at the generator.

In compliance with the November 5, 2010 Final Decision in the 2011-2013 Triennial filing¹, customers may not have natural gas as their primary heat source to qualify for an air source heat pump CIP rebate. Energy savings and rebates from these projects were not included in the 2013 CIP.

ENERGY AND DEMAND RESULTS – 2013	
AIR SOURCE HEAT PUMPS (R)	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	818,376
Demand Savings – kW	113.78

APPLIANCE RECYCLING

The Appliance Recycling Program offers residential customers an incentive to recycle inefficient, but operating refrigerators and freezers.

¹ Otter Tail Power Company's 2011-13 Triennial CIP Filing, Docket No. E017/CIP-10-356

Otter Tail promotes appliance recycling using various resources.

- Bill inserts targeted at residential customers in March, May, and July
- Radio campaign on local stations
- Program information, links to enrollment and appliance pickup scheduling, as well as a special flash ad placed on the home page at www.otpc.com
- Brochures available in customer service center lobbies and by request

Otter Tail provides customers a \$50/unit incentive to recycle their old, operating refrigerators and freezers, at no cost to the customer.

Appliance Type	Units Recycled
Refrigerators	351
Freezers	146
Total Units Recycled	497

This Program is included in the 2014 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
	Actual	Proposed	% of Goal
APPLIANCE RECYCLING			
Participation	497	350	142%
Budget \$	\$109,422	\$77,000	142%

Evaluation Methodology

The Company uses technical resource figures for the removal and recycling of second household refrigerators and freezers.

Energy Savings & Adjustments

ENERGY AND DEMAND RESULTS – 2013	
APPLIANCE RECYCLING	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	393,830
Demand Savings – kW	54.75

BE BRIGHT (previously called Change A Light, Change the World)

The Be Bright program aims to increase the market share for ENERGY STAR qualified compact fluorescent lamps (“CFLs”) while educating both consumers and retailers about the benefits of CFLs. LED’s were promoted on a small scale to consumers by offering special promotions. Although LED Holiday lighting rebates were available in 2013 none of our participating retailers wanted to be a part of that promotion.

Through the services of Wisconsin Energy Conservation Corporation (WECC), Otter Tail offers the Be Bright campaign with the following objectives.

- Leverage manufacturer dollars for instant consumer rebate incentives up to \$2 per CFL/\$10 LED and retailer dollars for advertising
- Highlight Otter Tail’s sponsorship of the promotion through press releases, in store displays, and special public relations events and CFL/LED bulb sales, and;
- Implement the program with seamless coordination with other Be Bright promotions throughout Minnesota and the Midwest.

There were 18 retailers in our service territory who participated in the 2013 campaign, contributing to sales of 37,212 bulbs.

Otter Tail promotes the Be Bright Program using various resources listed below:

- A bill insert
- The Company’s web site at www.otpc.com
- Newspaper ads
- Live, on-site radio remotes at the location of two participating retailers
- Brochures available in customer service center lobbies and by request

2013 Change a Light Detailed Participation	
15 watt replacing 60 watt	25,307
20 watt replacing 75 watt	3,569
26 watt replacing 100 watt	8,126
LED 12 – 20 watt	210
Total	37,212

The Program has been approved for continuation in the 2014 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
BE BRIGHT	Actual	Proposed	% of Goal
Participation	37,212	20,300	183%
Budget \$	\$99,560	\$90,000	111%

Evaluation Methodology

The Company uses technical resource figures for the installation of compact fluorescents.

Energy Savings & Adjustments

Savings for each CFL were determined by the bulb size purchased, and 1,095 hours of usage per year per the Technical Resource Manual as follows:

- 20 watt replacing 75 watt = 60.23 kWh savings
- 15 watt replacing 60 watt = 49.28 kWh savings
- 26 watt replacing 100 watt = 81.03 kWh savings

ENERGY AND DEMAND RESULTS – 2013	
BE BRIGHT	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	2,291,091
Demand Savings – kW	318.51

ENERGY FEEDBACK

The Energy Feedback program is a pilot project established in 2011, combining the Aclara Bill Prism project (“Bill Analyzer”), previously part of the Advertising and Education Program, and an Opower Home Energy Report project (“HER”). Both projects are behavior-based direct impact energy savings programs with the primary purpose of maximizing energy savings achieved through behavior changes that result from providing comparative energy use information to Minnesota residential customer across economic groups and demographics.

Energy Feedback includes the Bill Analyzer project, an opt-in program that provides customized, regular feedback to residential users through an online interface; and the HER project, an opt-out program based on direct mail delivery of up to 6 comparative energy usage reports to participating Minnesota residential customers each year.

Bill Analyzer- Bill Analyzer enables users to understand their individual energy use through online presentation of 25 months of billing history and analytic tools and calculators. Bill Analyzer includes a home energy profile tool, which is an online home energy audit in which details about the age and size of home, number and type of appliances in use, insulation and window features, heating system, and energy consumption are compiled and included in energy analysis. Participants that complete the energy profile are presented with performance benchmarks, comparing their energy use to similar homes. Customers can set their money savings goal and select an energy savings theme that reflects their approach to energy savings. Based on the selected theme energy savings actions are presented that will help them achieve their desired energy savings goal. Bill Analyzer permits customers to dig deeply into their personal billing and usage data through the bill history and bill analysis tools. They also can use resources including a library of energy-related topics and calculators.

Because it is an opt-in tool total user participation in Bill Analyzer is lower than the participation for other energy use comparison tools, but consists of a more highly motivated group of customers who have chosen to use the tool.

Minnesota residential customers were encouraged to participate in use of the Bill Analyzer tool in the following ways:

- Hero-spot ads ad presented on the Company website home page at www.otpc.com, for a five month period and a program page, and a demo tool within the website.
- Bill messages were include on service statements for two months.
- Bill inserts sent four times to all residential customers during 2013.
- Customer service guide sent to all new customers.
- *Guide to programs and services* sent to contractors.
- Articles in *Customer Connection*, the Company's bimonthly newsletter.
- A billboard display.

Opower Home Energy Reports – The HER program was launched in June 2011. Through the HER program comparative energy usage information is pushed out to randomly selected Minnesota residential customers. Program participants received up to six home energy reports during 2013.

Participation in the program is defined as any Minnesota residential customer that received one or more personalized Home Energy Report during 2013. The program had 33,649 participants in 2013.

Each Home Energy Report contained various personalized components, including:

- Comparisons of recent energy use to a group of 100 similar nearby homes.
- Comparison of recent energy use to current use, tracking household improvement over time.
- Targeted energy efficiency tips selected based on the home's energy use pattern and season, and household heating type.

PARTICIPATION AND BUDGET – 2013			
ENERGY FEEDBACK	Actual	Proposed	% of Goal
Bill Analyzer Participation	2,554	1,800	142%
OPower HER Participation	33,649	30,000	112%
Budget \$	\$355,101	\$391,400	91%

Evaluation Methodology – Bill Analyzer

In 2010, 2012, and 2013 Otter Tail contracted with Integral Analytics to perform an evaluation of the Bill Analyzer project. The methodology used in 2010 was approved by Minnesota Department of Commerce (“DOC”) staff for 2012 and 2013. The evaluation relied upon a statistical analysis of the actual billed electricity consumption before and after participation in the Bill Analyzer project.

The evaluation found that savings varied by the component or level of the Bill Analyzer tool the participant used. In addition to calculating the savings by component or level, Integral Analytics again calculated an average overall savings calculation. For 2013 each component beyond the Bill Analyzer landing page was included in the analysis. This resulted in a higher overall average saving per participant.

In 2013 the evaluation demonstrated an average 715 kWh per year, based on 2,554 participants.

In addition to analysis of post-participation usage compared to the customer’s own pre-participation usage, Integral Analytics completed an analysis of the participant group against a randomly selected control group.

The Bill Analyzer evaluation is included in Appendix B-Third Party Evaluations.

Evaluation Methodology – Opower HER

The 2013 evaluation of energy savings for the Opower HER program was completed by Opower using integrated data from a variety of sources that allow for detailed analysis of energy savings results. The evaluation is included in Appendix B- Third Party Evaluations. The data included:

1. **Consumption data:** Otter Tail provided weekly updates of consumption data to Opower for all households in the pilot program.
2. **Parcel data:** Opower received data, to the extent available from a third-party vendor, about household parcels, including house size, age, and value. To supplement this data, Opower sought parcel data from some county assessor offices in Otter Tail’s Minnesota service territory. Parcel data elements are static

with the exception of square footage and heating type, which may be updated at the customer's request.

3. **Demographic data:** Opower received demographic data, to the extent available from a third-party vendor, about participants, including household income, age of occupant(s), number of occupants, and an owner/renter indicator. The number of occupants is a field that is also available for update at customer's request.

The primary measure of success for the Home Energy Reports program is the difference between the average energy consumption of the homes in the treatment group and homes in the control group. Opower's analysis of the Home Energy Reports program relies upon a fixed-effects regression model indicating that this statistical methodology is standard procedure for the analysis of controlled experiments, is a well-accepted practice within the energy efficiency program measurement and verification community, and closely resembles the "Large Scale Data Analysis" techniques described in the Model Energy Efficiency Program Impact Evaluation Guide from the National Action Plan on Energy Efficiency.

Energy Savings & Adjustments

Overall adjusted energy savings associated with the HER program in 2013 totaled 4,861 MWh, equal to an average 144 kWh per participant household.

Overall adjusted energy savings associated with the Bill Analyzer program in 2013 totaled 1,826 MWh, equal to an average 715 kWh per participant household for 2013.

In accordance with the Decision of the Minnesota DER, these full savings are used in calculating the net benefits and cost effectiveness of the Energy Feedback Pilot program. For 2013, the energy savings associated with behavioral change has been reduced by two-thirds in the financial incentive calculation, based on the Decision² by the Deputy Commissioner of the DER.

ENERGY AND DEMAND RESULTS – 2013	
BILL ANALYZER	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	1,963,068
Demand Savings – kW	395.93

ENERGY AND DEMAND RESULTS – 2013	
HER	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	5,225,143
Demand Savings – kW	1,053.85

² April 26, 2012, Docket Nos. E,G999/CI-08-133, E017/CIP-10-356

ENERGY AND DEMAND RESULTS – 2013	
ENERGY FEEDBACK COMBINED RESULTS	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	7,188,211
Demand Savings – kW	1,449.78

GEOTHERMAL HEAT PUMPS

(Residential)

The Geothermal Heat Pump Program capitalizes on a renewable technology and targets residential customers currently using or considering the installation of less efficient resistance electric heating and cooling systems by offering rebates for high-efficiency geothermal heat pumps. During 2013 units were required to meet an Energy Star qualification. This Program is included in the 2014 CIP with efficiency requirements that will again match the minimum Energy Star requirements:

Type	COP	
	Open	Closed
Water to air	4.1	3.6
Water to water	3.5	3.1
Direct exchange	3.6	

Otter Tail promotes energy efficient heat pumps using the following resources:

- *Taking Care of Business* commercial CIP brochure
- *Guide to programs and services* available to contractors
- Brochures available in customer service center lobbies and by request
- Presentations and literature distribution at Builder and Electrical Workshops
- Print advertisement and educational articles to regional home owners in *Lake & Home Magazine* including information about the available tax credits
- Bill messages included on all customer statements
- Bill inserts about heat pump efficiency, financing, and rebates
- Training material covered with service representatives in annual and monthly training
- Program, rate, and rebates described within the Company's web site at www.otpc.com

The emphasis on energy efficiency coupled with federal incentives has helped drive participation in geothermal heat pump installations.

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
GEOHERMAL HEAT PUMPS (R)	Actual	Proposed	% of Goal
Participation	22	25	88%
Budget \$	\$72,555	\$64,000	113%

Evaluation Methodology

Engineering estimates are used to determine energy savings from each geothermal heat pump system installed. Technical resource figures are currently not available for geothermal heat pump systems.

Energy Savings & Adjustments

Otter Tail recognizes 15,636 kilowatt-hours of energy savings at the generator, based on an actual installed average size residential geothermal heat pump unit of 4.64 tons, including both summer cooling and winter heating savings. Demand savings are approximately 12.01 kW for coincident peak savings per unit at the generator.

ENERGY AND DEMAND RESULTS – 2013	
GEOHERMAL HEAT PUMPS (R)	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	344,000
Demand Savings – kW	264.17

In compliance with the November 5, 2010 Final Decision in the 2011-2013 Triennial filing³, customers may not have natural gas as their primary heat source to qualify for a geothermal heat pump CIP rebate. Energy savings and rebates from these projects were not included in the 2013 CIP.

HOME INSULATION

The Home Insulation Program targets residential customers with primary electric heat by offering rebates for contractor-installed weatherization and insulation measures.

³ Otter Tail Power Company's 2011-13 Triennial CIP Filing, Docket No. E017/CIP-10-356

Otter Tail promoted the Insulation Program using various resources:

- Bill inserts were sent to all residential customers in the month of August and a radio/television campaign aired in the month of October.
- Program information was included as part of the Company's web site at www.otpc.com.
- Rebate materials and program information was shared in addition to literature distribution at the Builder and Electrical workshops. Training material was presented to service reps and Idea Center personnel.
- Brochures available in customer service center lobbies and by request
- OPower energy reports included tips related to saving energy with better insulation and referred customers to the home insulation program.

This Program is included for continuation in the 2013 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
HOME INSULATION	Actual	Proposed	% of Goal
Participation	17	100	17%
Budget \$	\$14,671	\$66,000	22%

Although program participation was below expectations, we hope to increase activity in 2014 with larger incentives and an expansion of marketing channels and customer investment tools.

Evaluation Methodology

Otter Tail collected information on the measures completed by the customers, including weatherization, attic and sealing insulation, and/or wall insulation, square footage of area being insulated and the pre and post insulation values.

In 2013 Otter Tail calculated the kWh savings by the state recommended method which includes calculating 3 different measures: 1) attic bypass sealing and insulation, 2) wall insulation, and 3) air-sealing and weather stripping.

Energy Savings & Adjustments

Energy savings are calculated based on each customer's unique circumstances and location.

ENERGY AND DEMAND RESULTS – 2013	
HOME INSULATION	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	47,476
Demand Savings – kW	6.60

RESIDENTIAL DEMAND CONTROL

The Residential Demand Control (RDC) program is primarily a load management program that provides rebates and a lower rate for residential customers to purchase this in-home load management device. Under CIP, customers were offered a free RDC unit and wiring allowance to encourage participation in the program.

Recent changes to the Midwest Independent System Operator (MISO) resource adequacy rules have placed a higher value on summer demand response. Since RDC is primarily a winter demand response program, it will be impacted if MISO maintains its current construct. In the meantime, Otter Tail has limited its promotion of the program and rate. Otter Tail believes the RDC program and supporting rate can still be a good demand response resource, but will need modification to better align with the MISO rules.

Because of the evolving MISO market the RDC program was not promoted to customers. Otter Tail had no customer participation in 2013. The Company has not included the RDC program in the 2014-2016 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
RESIDENTIAL DEMAND CONTROLLER	Actual	Proposed	% of Goal
Participation	0	25	0%
Budget \$	\$6,299	\$29,000	22%

Evaluation Methodology

The Company claimed no participants or savings for 2013.

Energy Savings & Adjustments

The Company claimed no participants or savings for 2013.

ENERGY AND DEMAND RESULTS – 2013	
RESIDENTIAL DEMAND CONTROLLER	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	0.00
Demand Savings – kW	0.00

DIRECT IMPACT – COMMERCIAL

ADJUSTABLE SPEED DRIVES

Induction motors are the workhorses of industry, used widely and often exclusively in virtually every manufacturing plant and office building. However, the single most potent source of energy savings in induction motor systems lies not in the motor, but rather in the controls that govern the motor's operation. Adjustable speed drives are one method of modifying or controlling motor operation that is a proven option for improving performance and efficiency in drive systems.

Otter Tail promotes adjustable speed drives using various resources.

- *Taking Care of Business* commercial CIP brochure
- *Guide to programs and services* available to contractors
- Promotions and technical discussions at Builder and Electrical workshops for contractors
- Bill inserts promoting drive power system efficiency to commercial and industrial customers
- Program, technology, and rebate information available on the Company's web site at www.otpc.com

The Company is pleased with participation in the Adjustable Speed Drive Program. This Program is included in the 2014.

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
ADJUSTABLE SPEED DRIVES	Actual	Proposed	% of Goal
Participation	121	65	186%
Budget \$*	\$362,696	\$151,000	240%

*Budget does not include the commercial sector budget modification of \$990,378, approved on 12/18/13.

Evaluation Methodology

Engineering estimates are used to determine energy savings from each adjustable speed drive system installed. Technical resource figures are currently not available for adjustable speed drives.

Energy Savings & Adjustments

The Company utilizes engineering calculations that are based on calculations developed by the Electric Power Research Institute for fan-based and pump-based adjustable speed drive systems. Hours of operation and associated loading factors are provided by the customer as inputs for the energy and demand savings calculations.

ENERGY AND DEMAND RESULTS – 2013	
ADJUSTABLE SPEED DRIVES	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	6,408,181
Demand Savings – kW	792.14

AIR CONDITIONING CONTROL - PILOT

The Cool Savings air conditioning control program targets small commercial customers with a Fergus Falls, MN service address that have central air conditioning system. Customers are encouraged to enroll in the program and receive a \$5/ton credit each of the summer months (June-September).

Due to an increasing need for control capability during summer months, Otter Tail believes a pilot will help demonstrate how the program integrates with our current load management system, customer satisfaction with control, customer receptiveness to the pricing, structure of the program, and overall demand response capability. Otter Tail also hopes to gain knowledge in the following areas:

- Complexity of Installation: Commercial cooling loads are more complex to control than residential cooling loads. Many cooling loads have more than one compressor per unit, and some customers have more than one unit. Otter Tail would like to gain experience in the installation of these more complex systems.
- Cost: Due to the increased complexity of commercial cooling systems, Otter Tail would like to better understand the costs and options associated with the installation for the company and participating customers.
- Customer Feedback: Otter Tail would like to evaluate what messages enlist customer interest in the program, measure customer's satisfaction, and determine if the incentive is sufficient to attract and retain customers.

Otter Tail promotes the program through the following resources:

- Personal business contacts
- Letters sent directly to targeted small business owners with the probability of central air conditioning
- *Taking Care of Business* commercial CIP brochure
- *Guide to programs and services* available to contractors
- Program, technology, and rebate information available on the Company's web site at www.otpc.com

Two customers enrolled in the program in 2013, for a total of nine air conditioning units averaging 3.3 tons per unit.

In 2013, Otter Tail controlled air conditioning 25 days, totaling 56 hours and 30 minutes. This control time is within the 300-hour control limit in the air conditioning rider.

PARTICIPATION AND BUDGET – 2013			
AIR CONDITIONING CONTROL (C)	Actual	Proposed	% of Goal
Participation	9	15	60%
Budget \$*	\$6,986	\$25,500	27%

*Budget does not include the commercial sector budget modification of \$990,378, approved on 12/18/13.

Evaluation Methodology

Otter Tail has limited data for a proper evaluation of the program's savings. Otter Tail plans to evaluate the energy and demand savings for these commercial AC units once sufficient participation exists. Load data recorders have been installed at each of the locations enrolled and will be monitored for M & V purposes.

Energy Savings & Adjustments

ENERGY AND DEMAND RESULTS – 2013	
AIR CONDITIONING CONTROL (C)	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	98
Demand Savings – kW	4.38

AIR SOURCE HEAT PUMPS

(Commercial)

The Air Source Heat Pump Program targets commercial customers currently using or considering the installation of less efficient resistance electric heating and cooling systems by offering rebates for high-efficiency air source heat pumps. For 2013, Otter Tail relied on Energy Star qualifications as the minimum equipment efficiency requirement. The program is included in the 2014 CIP with efficiency requirements that will again match the minimum Energy Star requirements below:

Energy Star – ASHP	HSPF	SEER	EER
Split System	> or = 8.2	> or = 14.5	12.0
Package Terminal			> or = 11.0

Otter Tail promotes energy efficient heat pumps using various resources:

- *Taking Care of Business* commercial CIP brochure
- *Guide to programs and services* available to contractors
- Brochures available in customer service center lobbies
- Presentations and literature distribution at the Builder and Electrical workshops for contractors

- Bill messages included on all customer statements
- Bill inserts about heat pump efficiency, financing, and rebates
- Program, rate, and rebates described within the Company's web site at www.otpc.com

Rising energy costs and the emphasis on energy efficiency helped drive participation in air source heat pump installations.

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
AIR SOURCE HEAT PUMPS (C)	Actual	Proposed	% of Goal
Participation	106	50	212%
Budget \$*	\$55,619	\$63,000	88%

*Budget does not include the commercial sector budget modification of \$990,378, approved on 12/18/13.

Evaluation Methodology

In 2013 engineering estimates are used to determine energy savings from each air source heat pump system installed.

Energy Savings & Adjustments

Otter Tail recognizes 5,590 kilowatt-hours of energy savings, based on an actual average installed size commercial air source unit of approximately 1.42 tons, including summer and winter energy savings as approved in Otter Tail's 2011-2013 Triennial Filing. Demand savings are approximately 0.41 kW at the generator for peak savings per unit.

ENERGY AND DEMAND RESULTS – 2013	
AIR SOURCE HEAT PUMPS (C)	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	592,555
Demand Savings – kW	133.20

In compliance with the November 5, 2010 Final Decision in the 2011-2013 Triennial filing⁴, customers may not have natural gas as their primary heat source to qualify for an air source heat pump CIP rebate. Energy savings and rebates from these projects were not included in the 2013 CIP.

⁴ Otter Tail Power Company's 2011-13 Triennial CIP Filing, Docket No. E017/CIP-10-356

BUSINESS EDUCATION

The Business Education project instructs building operators on how to better operate their facilities to achieve greater energy savings.

Participation & Budget

The Company surveyed class participants from 2009, 2011 and 2012 to determine if they were still actively implementing operational changes associated with the Business Education Project. In total three participants responded to the survey, affirming their participation.

This Project has been discontinued in the 2014 CIP.

PARTICIPATION AND BUDGET – 2013			
Business Education Project	Actual	Proposed	% of Goal
Participation	3	5	60%
Budget \$*	\$8,720	\$11,000	79%

*Budget does not include the commercial sector budget modification of \$990,378, approved on 12/18/13.

Evaluation Methodology

Since the participants' completion of classes, the following steps have been taken to evaluate the project:

- Participant data from class attendance has been collected.
- Project information for each participant business location is being defined.
- Surveys were conducted in 2010, 2011, 2012, and 2013 to help determine energy impacts from any continued behavior modifications for each business.

In 2011 Navigant Consulting performed an independent evaluation of the project for the Midwest Energy Efficiency Alliance. The Company collaborated with Navigant during this analysis. Otter Tail believes the Navigant analysis provided more reliable savings estimates than Otter Tail could obtain from Otter Tail's small sample of participants.

In 2013 the Company has used the Navigant energy savings estimates, resulting in energy savings of 0.237 kWh/square foot and 0.061 watts/square foot for each BOC participant that also participated in other CIP programs. For participants that did not participate in other CIP programs the Company claims 0.721 kWh/square foot and 0.167 watts/square foot. Two of three BOC participants took part in other CIP programs.

Energy Savings & Adjustments

An average energy savings of 90,883 kWh and 23.33 kW per participant at the meter was claimed for this project using actual building square footage as reported.

ENERGY AND DEMAND RESULTS – 2013	
BUSINESS EDUCATION PROJECT	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	293,099
Demand Savings – kW	36.23

COMMERCIAL DESIGN ASSISTANCE

The Commercial Design Assistance Program offers building owners, architecture and engineering firms and developers the opportunity to participate in an integrated design process to identify and implement cost effective, energy-efficient design strategies in commercial new construction and major renovation projects.

The Commercial Design Assistance Program is implemented with the assistance of a consultant in the architectural industry who specializes in early design review, energy efficient building simulation, LEED certification, evaluation of Sustainable Buildings 2030 (SB2030) energy goals, and facilitation of interactive meetings to select energy efficient design strategies. Tools available through the State of Minnesota are used to develop SB2030 performance standards for all applicable projects.

Otter Tail promotes Commercial Design Assistance using various resources:

- *Taking Care of Business* commercial CIP brochure
- *Guide to Programs and Services* available to contractors
- The *Make it Electric* newsletter targeting commercial and industrial customers (when feasible).
- Brochures available in customer service center lobbies
- Presentations and literature distribution at the Builder and Electrical workshops for contractors
- Bill messages included on all customer statements
- Program, rate, and rebates described within the Company's web site at www.otpc.com
- Through the program consultant's network, membership, and participation as professionals in architectural and engineering organizations, including ASHRAE, AIA, and IES

PARTICIPATION AND BUDGET – 2013			
Commercial Design Assistance	Actual	Proposed	% of Goal
Participation	6	6	100%
Budget \$*	\$288,141	\$371,000	78%

*Budget does not include the commercial sector budget modification of \$990,378, approved on 12/18/13.

The Commercial Design Assistance program was new to Otter Tail's CIP with the Company's 2011-2013 CIP triennial filing. In the original filing of the Commercial Design Assistance program, Otter Tail proposed initiating approximately six projects in 2011, six projects in 2012, and six in 2013. Due to the length of the project lifecycle, Otter Tail further proposed completion of two projects starting in 2012 and six projects in 2013. The project lifecycle has evolved close to Otter Tail's original projections.

ENERGY AND DEMAND RESULTS – 2013	
Commercial Design Assistance	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	1,559,521
Demand Savings – kW	297.7

Otter Tail's program implementation consultant has taken all necessary steps to assure that baseline energy efficiency levels reflect all energy code modifications. Further, the Commercial Design Assistance program is included in the Company's 2014 CIP.

GEOTHERMAL HEAT PUMPS

(Commercial)

The Geothermal Heat Pump Program capitalizes on a renewable technology and targets commercial customers currently using or considering the installation of less efficient resistance electric heating and cooling systems by offering rebates for high-efficiency geothermal heat pumps. This Program is included in the 2014 CIP with efficiency requirements that will again match the minimum Energy Star requirements below:

Type	COP	
	Open	Closed
Water to air	4.1	3.6
Water to water	3.5	3.1
Direct exchange	3.6	

Otter Tail promotes energy efficient heat pumps using various promotional resources:

- *Taking Care of Business* commercial CIP brochure
- *Guide to Programs and Services* available to contractors
- Brochures available in customer service center lobbies
- Presentations and literature distribution at Builder and Electrical Workshops for contractors
- Bill messages included on all customer statements
- Bill inserts about heat pump efficiency, financing, and rebates
- Training material covered with service representatives in annual and monthly training
- Program, rate, and rebates described within the Company's web site at www.otpc.com

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
GEOTHERMAL HEAT PUMPS (C)	Actual	Proposed	% of Goal
Participation	18	60	30%
Budget \$*	\$167,897	\$163,000	103%

*Budget does not include the commercial sector budget modification of \$990,378, approved on 12/18/13.

Evaluation Methodology

Engineering estimates are used to determine energy savings from each geothermal heat pump system installed. Technical resource figures are currently not available for geothermal heat pump systems.

Energy Savings & Adjustments

Otter Tail recognizes 47,290 kilowatt-hours of energy savings at the generator, based on an average size commercial geothermal heat pump unit of 12.94 tons, including both summer cooling and winter heating savings. Demand savings are on average 34.02 kW for peak coincident savings per unit at the generator. Additional evaluation of demand and energy savings from geothermal installations is being conducted informally through Commercial Design Assistance projects featuring geothermal systems.

ENERGY AND DEMAND RESULTS – 2013	
GEOTHERMAL HEAT PUMPS (C)	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	851,224
Demand Savings – kW	191.35

In compliance with the November 5, 2010 Final Decision in the 2011-2013 Triennial filing⁵, customers may not have natural gas as their primary heat source to qualify for a geothermal heat pump CIP rebate. Energy savings and rebates from these projects were not included in the 2013 CIP.

GRANTS (CUSTOM PROJECTS)

The Grants Program offers customized incentives to commercial and industrial customers for conservation and efficiency improvements.

In 2013, Otter Tail analyzed a variety of customer-submitted grant projects with 51 of these projects approved for incentives.

Grant Custom Projects Type of System Installation	Quantity
Automation	8
Building Envelope	20
Chiller System	3
Compressed Air System	2
Cooking Equipment	1
Cooling	1
Heating System	1
Production Equipment	4
Re-Commissioning	3
Refrigeration System	4
Ventilation System	2
Welding	2
Total	51

The Company believes that both its hospital/government segmentation strategy and focus on building envelope improvements helped participation in the Grant Program. Typically building envelope upgrades are difficult for customers to cost-justify, and this focus improved the participation of customers making building envelope upgrades.

Otter Tail promotes the Grant Program through a variety of resources.

- *Taking Care of Business* commercial CIP brochure
- *Guide to Programs and Services* available to contractors
- Presentations and literature distribution at the Company's annual Builder and Electrical workshops for contractors

⁵ Otter Tail Power Company's 2011-13 Triennial CIP Filing, Docket No. E017/CIP-10-356

- Program, technology, and rebate information available on the Company's web site at www.otpc.com
- *Make It Electric* newsletter for commercial and industrial customers

In pursuit of long-term and long measure life savings, Otter Tail is aggressively pursuing alternative technologies and processes that yield sustainable energy savings. In 2011-2013 three new efficiency efforts were launched, with the objective that these projects would feed into the Custom Grant Project:

Recommissioning/Retrocommissioning ("RCx")

Commercial and institutional buildings typically experience operational and occupancy changes over time. These changes, combined with limited capital and human resources available for preventive maintenance, challenge the ability of the building's heating, ventilation, and cooling, and other mechanical, electrical, and envelope systems to perform at original efficiency levels.

Natural Resources Canada defines recommissioning ("RCx") as a holistic, systematic process applied to existing buildings to identify and implement operational and maintenance improvements, and to ensure continued performance over time. Further, RCx optimizes how equipment and systems operate as well as how systems function together. RCx may include recommendations for capital improvements, but its primary focus is on building operation. RCx refers to a similar process for buildings never originally commissioned after construction completion.

In 2013, Otter Tail provided study rebates for successful RCx studies encompassing numerous buildings on a university campus as well as a project at a healthcare facility.. The RCx program shows promise and the company looks forward to growing demand for the program as customers and engineering firms continue to pursue interests in energy savings from building retro- and recommissioning services.

Otter Tail has included Recommissioning/Retrocommissioning (RCx) as a new program in its 2014-2016 CIP.

Refrigeration RCx

Late in 2012, Otter Tail began discussions with Minnesota Technical Assistance Program (MNTAP) regarding market opportunities for assessment and recommissioning services for industrial plants with ammonia-based refrigeration systems. Otter Tail and MNTAP were optimistic about identifying energy efficiency opportunities through a single assessment scheduled for completion later in 2013. Careful screening of this project on behalf of Otter Tail, MNTAP and the potential participant revealed that the potential customer's past investments in plant efficiency and diligent operation and maintenance practices left few opportunities for improvement.

Data Center Efficiency

Data centers are intense energy users due to the high power requirements of IT equipment. This equipment generates heat while it operates, yet ironically requires a relatively cool operating environment. Consequently, space cooling equipment is another power intensive end use that drives up the energy intensity of data center facilities.

No data center projects were processed through the grant program in 2013.

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
GRANTS	Actual	Proposed	% of Goal
Participation	51	30	170%
Budget \$*	\$665,624	\$540,000	123%

*Budget does not include the commercial sector budget modification of \$990,378, approved on 12/18/13.

Evaluation Methodology

Estimated savings from custom grant measures initially come directly from customers submitting detailed information documenting demand and energy savings for each proposed measure. The Company then verifies the feasibility of the proposed savings, and if necessary, makes modifications to the customer's submitted figures. Otter Tail offers assistance as needed for our commercial and industrial customers to help determine the energy and demand savings needed to develop a grant proposal.

End-use metering is also an option for verifying impact savings. In addition, the customer often works with internal or third-party engineers to determine and verify savings.

The Large Custom Grant Measurement and Verification ("M&V") protocols affect any large project with estimated savings exceeding one million kilowatts hours. The protocols include several options for metering and verification of large grant projects that meet the protocol criteria.

In 2013, one project qualified for the new M&V process. The large custom project was completed by the customer in 2012. Otter Tail claimed half of the project energy and demand savings in its 2012 Status report. Otter Tail performed M&V on the project during the 2013 CIP plan year. In February of 2014 Otter Tail, following the M&V protocols, submitted its final project M&V to DER Staff. In March 2014 the DER Staff approved the project's incentive amount, energy savings, demand savings, and customer cost savings. The associated energy and demand savings that were not claimed in 2012 are included in the 2013 total savings.

Energy Savings & Adjustments

Energy savings are based on customer data and verification by engineering staff.

ENERGY AND DEMAND RESULTS – 2013	
GRANTS	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	6,017,977
Demand Savings – kW	1,318.62

The Grant program is included in Otter Tail's 2014 CIP.

LIGHTING RETROFIT

The Lighting Retrofit program provides cash incentives to commercial and industrial customers for purchasing and installing energy-efficient lighting technologies including high efficiency fluorescent fixtures and lamps, compact fluorescent fixtures and lamps, efficient High-Intensity Discharge lamp fixtures and lamps, LED systems, induction lighting systems, electronic ballasts, and lighting controls.

Otter Tail actively promotes the Lighting Program through a variety of strategies.

- *Taking Care of Business* commercial and industrial CIP brochure
- Presentations and literature distribution at Builder and Electrical workshops for contractors
- Personal interactions between customers and Company program implementation staff
- *Guide to Programs and Services* sent to contractors.
- Program, technology, and rebate information available on the Company's web site at www.otpc.com
- Make it Electric newsletter for commercial and industrial customers
- Direct mail campaigns targeting nearly all commercial and industrial customers

Otter Tail has accounted for and included lamp disposal and recycling costs for all energy efficiency measures evaluated in the Lighting Retrofit program.

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
LIGHTING	Actual	Proposed	% of Goal
Participation	640	194	330%
Budget \$*	\$1,535,080	\$669,002	229%

*Budget does not include the commercial sector budget modification of \$990,378, approved on 12/18/13.

Otter Tail increased incentives by 50 percent for most lighting retrofit measures in the fourth quarter of 2012 and through 2013. The increased incentive improves the return on investment for participants and encourages participation from hard-to-reach customers that have opted not to participate in the past. Further, the higher incentives offered customers an opportunity to accelerate removal of inefficient T12 fluorescent lighting with lamps declining in availability due to implementation of federal legislation banning manufacturing and imports of T12 fluorescent lighting. As evidenced by our 2010 DSM Potential Study, a sizeable percentage of Otter Tail's commercial customers still have T12 and other inefficient lighting systems in place. Otter Tail is encouraging customers to convert to more efficient lighting through its Lighting Retrofit program.

Evaluation Methodology

Engineering estimates, survey data, and the Technical Resource Manual (TRM) are being used to calculate impact savings for the Lighting Retrofit program. The Company has documented all existing lighting wattage that is removed at each site, and compared that to the actual energy efficient lighting wattage being installed to calculate energy savings. Hours of operation are determined by the TRM according to customer type.

Energy Savings & Adjustments

For retrofit lighting, wattage of measures being installed is compared with wattage of measures being removed to determine kilowatt savings. The TRM establishes hours of operation. In accordance with the TRM protocols, energy savings adjustments of 11 percent were allocated to those businesses having electric mechanical cooling.

ENERGY AND DEMAND RESULTS – 2013	
LIGHTING	At the Generator (DSM More Coincident Peak kW)
Energy Savings – kWh	10,090,936
Demand Savings – kW	1,926.33

The Lighting Retrofit program is continued in Otter Tail's 2014 CIP.

LIGHTING – NEW CONSTRUCTION

Opportunities exist for customers to implement lighting technologies that are more efficient than widely-accepted, standard efficiency lighting systems during the new construction process. Examples of these technologies and systems include:

- High Intensity fluorescent
- High Performance T8 lamps & ballasts/reduced wattage T8 lamps
- High efficiency ceramic metal halide
- High efficiency exit lighting
- LED fixtures and lamps

Otter Tail promotes the Lighting--New Construction program using various promotional resources.

- *Taking Care of Business* commercial CIP brochure
- *Guide to Programs and Services* available to contractors
- Promotions and technical discussions at Builder and Electrical workshops for contractors
- Program, technology, rebate information available on the Company's web site at www.otpc.com
- Personal consultations between program implementation staff and customers

Otter Tail attributes participation numbers to increases in economic growth and awareness of the program among contractors, vendors, and customers.

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
LIGHTING – NEW CONSTRUCTION	Actual	Proposed	% of Goal
Participation	54	17	318%
Budget \$*	\$91,105	\$31,395	290%

*Budget does not include the commercial sector budget modification of \$990,378, approved on 12/18/13.

Evaluation Methodology

Engineering estimates and the TRM are used to calculate impact savings for the program. Hours of operation are determined by the TRM according to customer type.

Energy Savings & Adjustments

For newly-installed lighting systems, qualifying installed measures are compared to baseline efficiency systems to determine kilowatt-hour savings. The TRM provided savings, hours of operation, and adjustment for participants with electric mechanical cooling.

ENERGY AND DEMAND RESULTS – 2013	
LIGHTING – NEW CONSTRUCTION	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	1,456,612
Demand Savings – kW	278.06

This Program is continued in the 2014 CIP.

MOTORS

The goal of the 2013 Motors program is to reduce system peak demand and energy use by offering customers incentives to purchase and install motors that meet and/or exceed NEMA Premium® efficiency ratings in various applications. The Motor Rebate Program covers motor sizes from one horsepower up to 500 horsepower in size.

The Motors program included additional incentives for customers upgrading to high-efficiency motors with explosion-proof enclosures. For explosion-proof motors, the Company has developed minimum efficiency levels needed to qualify for rebate incentives based on the following criteria from MotorMaster software.

- Motor horsepower
- NEMA Premium® efficiency levels
- Energy Policy Act 1992 efficiency levels
- Motor Revolutions per minute (RPM)
- Motor costs

Otter Tail promotes the Motors Program through a variety of resources:

- *Taking Care of Business* commercial CIP brochure
- *Guide to Programs and Services* available to contractors
- Through bill inserts targeting commercial and industrial customers
- Presentations and literature distribution at the Company's annual Builder and Electrical workshops for contractors
- in the *Make It Electric* newsletter for commercial and industrial customers
- Personal consultations between program implementation staff and customers
- Program, technology, and rebate information available on the Company's web site at www.otpc.com

Participation in the 2013 Motors program exceeded goals. In past years, Otter Tail representatives that work with customers have reported that availability of motors exceeding NEMA Premium efficiency has been limited. In 2013, Otter Tail was encouraged to hear anecdotal reports from staff that availability of motors exceeding NEMA Premium efficiency is increasing.

This Program is continued in the 2014 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
MOTORS	Actual	Proposed	% of Goal
Participation	134	71	189%
Budget \$*	\$102,391	\$65,725	156%

*Budget does not include the commercial sector budget modification of \$990,378, approved on 12/18/13.

Motor Types Rebated	
New / replace non-working	20
Replace working	114
Total Motors Rebated	134

Evaluation Methodology

Otter Tail used Minnesota's TRM data when available and applicable, and engineering estimates and MotorMaster software to determine energy savings for specialty motors currently not in the Technical Resource Manual. For 1 to 200 horsepower motors installed in new applications and for motors replaced at failure, Otter Tail used NEMA Premium efficiency levels as baseline efficiency for totally-enclosed fan-cooled and open drip-proof motors.

Energy Savings & Adjustments

Impacts for the Motors Program are based on technical resource calculations and engineering estimates. In accordance with the TRM, a standard 78 percent loading factor was used in the calculation for kilowatt-hour savings.

NEMA efficiency rating, horsepower, motor speed, run-time hours, and quantity are taken from the customer's application form.

The Motors program is included in the 2014 CIP.

ENERGY AND DEMAND RESULTS – 2013	
MOTORS	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	524,613
Demand Savings – kW	64.85

PLAN REVIEW

The Plan Review Program (promoted as SmartPlan) encourages building owners, architects, and design engineers to incorporate energy efficient design features into new commercial and industrial building construction. Eligible customers receive a free review of proposed building plans and specifications during the preliminary design process. The program offers incentives to customers that incorporate systems exceeding the State of Minnesota Energy Code in the following design areas.

- Heating, Ventilation, and Air Conditioning (HVAC) systems
- Controls

- Building envelopes
- Lighting systems

The Plan Review program offers an added incentive for customers adopting measures proposed during the plan review process that go above measures already incorporated in the customers' construction documents. To maintain acceptable cost effectiveness levels, participation is limited to projects sized at 15,000 square feet or greater.

Otter Tail promotes the Plan Review Program through a variety of resources.

- *Taking Care of Business* commercial CIP brochure
- *Guide to programs and services* available to contractors
- Presentation and literature distribution at the Company's Builder and Electrical workshops for contractors
- Personal communications between Company representatives and targeted customers
- Program, technology, and rebate information available on the Company's web site at www.otpc.com

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
PLAN REVIEW	Actual	Proposed	% of Goal
Participation	0	8	0%
Budget \$*	\$1,009	\$106,000	1%

*Budget does not include the commercial sector budget modification of \$990,378, approved on 12/18/13.

Otter Tail launched the Commercial Design Assistance program in 2011, which targets a market segment almost identical to that of the Plan Review program. Otter Tail did not include the Plan Review Program in its 2014-2016 CIP.

Evaluation Methodology

Each system is individually evaluated for energy and demand savings using engineering estimates with comparisons to the State of Minnesota Energy Code as the baseline. A third-party engineering firm is involved in determining and quantifying savings from new building construction projects – those projects taking advantage of incorporating energy efficient systems and controls during new building design.

Energy Savings

Energy savings calculations are based on comparison of customers' proposed building components to the State of Minnesota Energy Code. Otter Tail relies on a third party engineering firm for baseline building efficiency, energy code analysis, and savings calculations.

ENERGY AND DEMAND RESULTS – 2013	
PLAN REVIEW	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	0
Demand Savings – kW	0

REFRIGERATION

The Refrigeration Program is designed to promote high-efficiency refrigeration technologies, including measures to upgrade compressor, condenser, and display case efficiency.

A study completed by Navigant titled, “Energy Savings Potential and R&D Opportunities for Commercial Refrigeration identified the following commercially available technologies as opportunities for improving energy efficiency in super market refrigeration systems:

- High efficiency fan motors
- High efficiency compressor upgrades
- Improved refrigeration controls
- High efficiency lighting
- Advanced door technologies

Otter Tail incorporates incentives for these and other measures in its program.

Otter Tail is currently working jointly with Center for Energy and the Environment, independent refrigeration contractors and specialized refrigeration consultants to reach the commercial market for refrigeration efficiency upgrades and the installation of high efficiency refrigeration systems in new construction applications.

Otter Tail promotes the Refrigeration Program using various promotional resources:

- *Taking Care of Business* commercial CIP brochure
- *Guide to programs and services* available to contractors
- Program technology, and rebate information available on the Company’s web site at www.otpc.com
- Specialized contractor information kits provided for refrigeration contractors
- Follow-up with personal contractor contacts
- Focused, personal contacts targeting grocery, convenience, and liquor establishments (see paragraphs below).

This Program is included for continuation in the 2014-2016 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
REFRIGERATION	Actual	Proposed	% of Goal
Participation	59	24	246%
Budget \$*	\$174,178	\$65,000	268%

*Budget does not include the commercial sector budget modification of \$990,378, approved on 12/18/13.

Evaluation Methodology

Otter Tail used Minnesota's TRM. The Company also used additional research from American Society of Heating, Refrigerating and Air-conditioning Engineers ("ASHRAE") and E-Source to determine energy savings from the refrigeration clean-and-tune measures.

Energy Savings & Adjustments

The Company has used the Technical Resource Manual and engineering estimates for each of the different refrigeration components. Savings for each refrigeration measure rebated is adjusted according to the standard size and its associated savings.

ENERGY AND DEMAND RESULTS – 2013	
REFRIGERATION	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	1,288,536
Demand Savings – kW	245.98

DIRECT IMPACT – LOW INCOME

HOUSE THERAPY

The House Therapy Program's primary focus is audit and weatherization services for low-income residential customers. The following table provides details on measures installed and whether the participants were owners or renters.

House Therapy -- Owner / Renter Detail 2013			
Installed measures	Owners	Renters	Total
Audit	127	1	128
Attic Insulation Materials	14	0	14
Compact Fluorescent Lamp	881	12	893
Engine Heater Timer	102	1	103
Exterior Wall Insulation Materials	2	0	2
Faucet Aerator	169	1	170
Foundation Insulation Materials	2	0	2
Freezer	20	0	20
Low-flow Showerhead	76	1	77
Pipe Insulation	24	0	24
Refrigeration	45	0	45
Water Heater	16	1	17
Water Heater - Reduce Temperature	81	1	82
Water Heater--Controlled Ser. Rate	7	0	7
Weatherization	14	0	14

House Therapy -- Owner / Renter Detail - 2013				
	CAP Spending	Percent	Participation	Percent
Owners	\$109,906	99%	127	98%
Renters	\$1,389	1%	2	2%
Total	\$111,295	100%	129	100%

The Company meets yearly with the local Community Action Program (“CAP”) Agencies to implement House Therapy as cost-effectively as possible and commends the agencies that are committed to the program. One agency closed in 2012, but two other agencies are now serving that area.

Otter Tail promotes House Therapy using various resources.

- A residential bill insert
- Part of the environment disclosure insert distributed to all customers twice a year
- Part of the Company’s website listing the program and each of the agencies that implement the program at www.otpc.com

This Program has been approved for continuation in the 2014 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2013			
HOUSE THERAPY	Actual	Proposed	% of Goal
Participation	129	175	74%
Budget \$	\$142,054	\$150,000	95%

Evaluation Methodology

An impact evaluation of the House Therapy Program was performed in prior years for Otter Tail by Resource Alternatives to determine weatherization savings for single family and multi-family homes. In 2013 the Technical Resource Manual was used for many of the additional House Therapy components. Where technical resources were not available, engineering estimates were used.

Energy Savings & Adjustments

Using PRISM software, a nationally recognized tool for weather normalization of energy use data, average savings of 1,325 kilowatt-hours for single family and 649 kilowatt-hours for multi-family are used. The TRM and engineering estimates were used for the additional measures installed, including CFLs, energy efficient refrigerators, freezers, water heaters, and kits including faucet aerators, showerheads, and pipe-wrap.

Technical resource Measures – House Therapy, kWh at the meter	
CFL installation	81
Engine Block Timer	242
(aerator, showerhead, pipe-wrap)	760
Water Heater Temp Set-Back	723
Refrigerator Remove & Replace	927
Freezer Remove & Replace	521
Water Heater Replace	409

ENERGY AND DEMAND RESULTS – 2013	
HOUSE THERAPY	At the Generator (DSMore Coincident Peak kW)
Energy Savings – kWh	307,911
Demand Savings – kW	53.91

INDIRECT IMPACT PROJECTS / REGULATORY REQUIREMENTS

ADVERTISING & EDUCATION – Residential & Commercial

Advertising & Education – Residential

The Advertising & Education Program for 2013 targeted Minnesota residential customers and children with reinforcing messages to make conserving energy a lifestyle. Three approaches were used:

- *Advertising* that increases awareness, educates about technologies and options and personal energy usage, and motivates individuals to take action to conserve energy.
- *Internet-based resources* including YouTube.com videos, ConservingElectricity.com web advertisement, and web-based content at www.otpc.com.
- *Classroom based presentations* targeting 4th to 6th graders with educational messages about energy production, energy use, and conservation education across all economic groups.

Advertising

Two TV and three radio campaigns were run during 2013. These included:

- *Just 15 minutes:* A media campaign that included television, radio, web home page messaging, and lobby signs was completed to educate customers about the energy conservation and peak demand management benefits of cycling central air-conditioning systems. The ad was also used to raise awareness of and drive participation in the CoolSavings program.
- *Insulation:* A media campaign that included television, radio, and web home page messaging was completed to educate customers about the energy savings that proper home insulation offers. The ad also was used to raise awareness of and drive participation in the Home Insulation rebate program.
- *Air source heat pump:* A radio ad that promoted the energy and cost savings benefits of air source heat pumps for winter heating and when cycled during the summer cooling season. The ad also was used to raise awareness of and drive participation in the Heat Pump rebate program.

Internet-based resources

This program includes development of online resources to support media campaign topics and to promote participation in other energy efficiency programs in the CIP portfolio. Web participation is based on unique visitors to the website material. Data is collected from web analytic tools used on the company websites. Web resources are provided online at www.conservingelectricity.com and at www.otpc.com. Materials include information on energy efficient construction, Energy Star appliances, programmable thermostats, television and peripherals, energy tax credits, energy saving tips, energy efficient home insulation and weather stripping, appliance usage charts, and CIP program details. The www.conservingelectricity.com had 59,889 unique visitors in 2013. Pages most visited were electric space heater use, programmable thermostat, TV

energy cost primer, energy-saving gift ideas, and holiday LED lights pages. Based on the percentage of the Company customer's located in Minnesota, 45 percent, or 26,950 of all visitors are estimated to be Minnesota customers.

Home page hero ads placed on www.otpc.com were used to promote CIP programs including CoolSavings air-conditioning cycling program, appliance recycling program, air-source heat pump program, and home insulation. Traffic generated as click-throughs to the program details was tracked as participation resulting from these ads. 83,142 unique web site visitors landed on CIP program pages. Based on the percentage of the Company customer's located in Minnesota, 45 percent, or 37,414 of all visitors are estimated to be Minnesota customers.

Two series of YouTube videos continued to be presented to customers. One series of three videos is focused on selecting energy efficient gifts during the holidays. This series includes the following topics:

- Use of smart strips to save energy associated with TV and computer peripherals
- Selecting an energy efficient television set
- Choosing a digital picture frame with power saving features

The second series is focused on home insulation and maintenance and includes the following topics:

- Weatherization
- Furnace filter change out
- Sealing of attic access doors
- Sealing attic bypass
- Insulating and sealing rim joists

During 2013 6,740 viewers watched these YouTube videos of which 45 percent or 3,033 are estimated to be Minnesota customers.

Classroom presentations

The Science Museum of Minnesota conducted an interactive lyceum program reaching 25 Minnesota schools over 19 days during October and one day in December, 2013. In small community schools students in 4th through 6th grades are invited to attend. In larger school systems 6th grade classes are targeted. The invitation schedule aims to reach out to all students in the Otter Tail service territory over a three year period. Participation is dependent on school administrators requesting the program. The total number of students reached during the 2013 tour was 1,422. The program remains popular with the school districts and program material is in line with the Minnesota school curriculum standards.

Additional activities

- Energy efficiency and conservation related literature is made available to Minnesota customers upon request and through customer service office locations. These include a booklet of home energy savings tips, new construction resources, and other pieces related to energy efficiency, and energy efficient technologies, and program specific

information. Conservation articles were included in the Company's bimonthly newsletter including one issue specially designed for kids.

This Program has been approved for continuation in the 2014 CIP.

2013 A&E Detailed Participation	
Science Museum School Tour	1,422
Web ad click throughs	454
Web visits tied to advertising spots	37,414
YouTube videos	3,033
Web visits to ConservingElectricity.com	26,950
Total	69,273

PARTICIPATION AND BUDGET – 2013			
ADVERTISING & EDUCATION	Actual	Proposed	% of Goal
Residential Participation	69,273*	3,600	1,986%
Budget \$	\$145,721	\$146,500	99%

*Web-based ad participation was not included when the original participation goal was established, but was added as an effective means to reach customers. In addition, participation in web visits to Conserving.Electricity.com and www.otpc.com has increased significantly from past years.

Advertising and Education - Commercial

Energy Star for Healthcare and Government, Market Segmentation

Otter Tail continued its strategy of targeting Health Care and Government customer segments 2013 and added a focus on large commercial and industrial refrigeration loads; large- and mid-tier data centers; and customers with facilities ripe for energy savings opportunities available through retro- and recommissioning services.

The Company specifically set a goal of personally visiting 50 customers in the health care and government segments in 2011, 2012, and 2013. In addition, customer service staff received training in LEED, Green Globes, and Energy Star Benchmarking in 2011, and these areas remained a focus in 2013.

The goal of the market segmentation and in depth training strategy was to enhance market penetration of Otter Tail's efficiency programs and to assist in achieving the State of Minnesota Office of Energy Security goal of certifying 1,000 commercial buildings as Energy Star-labeled, and 100 commercial buildings as LEED-certified or Green Globes-certified by December 2010. Specifically Otter Tail customer visits included a focus in the following areas:

- Recommissioning & retrocommissioning (“RCx”)— Development of incentives for RCx services has been positive, with two customers completing an RCx study and implementing all recommended measures in 2013.
- State of Minnesota B3 Sustainable Buildings Guidelines
- Integrated building design and an introduction to Otter Tail’s Commercial Design Assistance Program.

Otter Tail has continually documented visits to the government and healthcare segment, in a computer database, throughout the 2011-2013 triennial. Unfortunately the database failed in November of 2013. Currently the exact number of 2013 government and healthcare segment visits is not accessible. Otter Tail is in the process of moving the data over to a more reliable marketing information system. Because Otter Tail’s efforts in contacting these customers were similar to 2012 numbers, we have assumed similar customer visit for the 2013 year, as shown below.

2013 A&E – Commercial Customer Visits			
	Actual	Goal	% of Goal
Government	68	50	136%
Health Care	16	50	32%
Total	84	100	84%

ACTUAL / BUDGET – 2013			
ADVERTISING & EDUCATION	Actual	Proposed	% of Goal
Commercial Budget \$	\$3,582	\$25,000	14%

COMPRESSED AIR AUDITS - Commercial

The Compressed Air Audits project portion of the program pays up to 80 percent of compressed audit costs, with a maximum of \$10,000 per participant. The project relies on industry consultants to provide professional audit services with an unbiased report on saving energy with compressed air system improvements.

This Project has been approved for continuation in the 2014 CIP.

PARTICIPATION AND BUDGET – 2013			
COMPRESSED AIR AUDITS	Actual	Proposed	% of Goal
Participation	2	4	50%
Budget \$	\$12,006	\$20,000	60%

FINANCING – Residential & Commercial

The Customer Financing Program is designed to provide low-interest loans for energy-efficiency improvement projects currently included in the Company's CIP. These improvements include, but are not limited to lighting, motors, variable speed drives, and heat pumps.

The difference between the interest expense at the Company's after-tax cost of capital and the expense at the customer's interest rate is the cost charged to the CIP Tracker Account. The interest rate was 1.9 percent for 2013. Customers are given a choice between rebates and financing.

Otter Tail promotes the low-interest Financing Program in various resources.

- *Taking Care of Business* commercial CIP booklet
- *Guide to programs and services* available to contractors
- A bill message on monthly service statements
- Program brochures included with materials requests to customers
- Part of the Company's web site at www.otpc.com
- Lobby signs in local Customer Service Centers

2013 Financing Details by Customer Class			
	Residential	Commercial	Total
Participation Goal	7	5	12
Participation Actual	1	0	1
% of Goal	14%	0%	0%
Budget Goal	\$13,000	\$32,000	\$45,000
Budget Actual	\$6,816	\$6,816	\$13,633
% of Goal	52%	21%	30%

This Program has been approved for continuation in the 2014 CIP.

Although 2013 had only one participant in the low interest financing program, customers appreciate the choice of a rebate or the online bill financing option. In addition, the program tracks expenses from previous finance contract participants.

IMPLEMENTATION & TRAINING – Residential & Commercial

The Implementation and Training Program provides instruction about energy-efficient technologies and DSM trends for the Company's design, implementation, and customer service staff. This program also provides training for customers, electricians, realtors, insulation installers, and other contractors. Several energy-efficiency workshops are held at various times through the year in locations in and around the service territory. Otter Tail co-sponsored several of these events with Minnkota Electric Cooperative.

Workshops were promoted on our website, in newsletters, and through direct mail pieces.

2013 Implementation & Training Details by Customer Class			
	Residential	Commercial	Total
Participation Goal	175	250	425
Participation Actual	74	359	433
% of Goal	42%	144%	102%
Budget Goal	\$40,000	\$60,000	\$100,000
Budget Actual	\$35,042	\$42,417	\$77,458
% of Goal	88%	71%	77%

This Program has been approved for continuation in the 2014 CIP.

PROGRAM DEVELOPMENT

The Program Development project includes CIP strategic market planning analysis, CIP-related resource planning work, and CIP-related regulatory coordination. It also includes program development time for research and studying new energy-efficient technologies and DSM. In 2013, CIP Development funded appropriate development research and information from internal and external sources, such as Chartwell and E-Source.

Otter Tail's 2011-2013 CIP plan included researching and developing a system capable of providing the data necessary for reporting, forecasting, tracking, and processing CIP rebates. Development of the new system required significant internal and external resources. Phase 1 of the new system has launched, with 2013 customer rebates and program information being processed and program details tracked.

This Program has been approved for continuation in the 2014 CIP.

PARTICIPATION AND BUDGET – 2013			
CIP DEVELOPMENT	Actual	Proposed	% of Goal
Participation	N/A	N/A	N/A
Budget \$	\$483,939	\$500,000	97%

REGULATORY REQUIREMENTS

PUC ASSESSMENTS / REGULATORY (NGEA) ASSESSMENTS

PUC ASSESSMENTS / REGULATORY (NGEA) ASSESSMENTS			
	Actual	Proposed	% of Goal
PUC Assessments	\$6,181	\$90,000	7%
Regulatory Assessments (NGEA)	\$95,687	\$25,000	383%

ASSESSMENTS	
NGEA Assessment – technical assistance	\$9,464
NGEA Assessment – R&D grant	\$75,708
NGEA Assessment – facilities efficiency	\$10,515
Total NGEA Assessments	\$95,687
Direct PUC Assessments	\$6,181
Total	\$101,867

MISCELLANEOUS / INACTIVE PROGRAM COSTS

These are inactive and miscellaneous programs. The associated costs, including closing costs for these programs, were charged to the 2013 CIP tracker account. Each is detailed separately below.

ACCOUNTING ADJUSTMENTS

Three accounting adjustments were required in 2013 totaling (\$16.93).

The first was to record a true up to the 2012 year end estimated billing from Wisconsin Energy Corporation for the Be Bright program (formerly Change A Light, Change the World) reflecting an increase in costs of \$981.64.

The second was to record a refund in the House Therapy program in which a CAP agency was overbilled (\$273.00) for labor in 2012 for installing a water heater on a controlled service rate.

The third adjustment was a result of a RDC unit that was purchased for a customer under the RDC program in 2012 but the unit was never installed and therefore returned and installed at one of OTP's non-CIP customer locations. This resulted in a decrease in costs by (\$725.57).

Since 1993, Otter Tail has implemented an internal process to handle moving incorrect charges between project work orders. A line item has been added to the CIP Tracker Account to reflect those charges that are in transition, and the Company believes this method allows us to report current year program costs more accurately.

TOWN ENERGY CHALLENGE PILOT

For the first time in Minnesota's history an entire town served by Otter Tail and every single residence in that community was chosen to be "On for Conservation!" Otter Tail set out to determine if a highly-focused implementation plan, higher incentives, and community enthusiasm could generate significant energy savings and if so, at what cost. Rothsay, Minnesota was selected as our Community Energy Challenger partner. As part of this effort, residents, students, and town leaders worked together with Otter Tail to make the entire town more energy efficient.

These efforts continue with support from the SC/EC (Student's for Community Energy Challenge) team. In 2013 the SC/EC team promoted community signup for the 5th year of the Energy Pledge. The student-led effort was again instrumental in collecting and tallying the pledges, which were sent out prior to the start of school in the fall of 2013. The students personally visited or called residents and with their help and encouragement the return rate of signed pledges was approximately 43 percent this year.

Evaluation Methodology

Otter Tail utilized an independent third party analysis for calculating the demand and energy savings for the Town Energy Challenge.

Integral Analytics, an independent third party, performed detailed modeling and analysis of the billing data of Otter Tail's Rothsay customers to determine energy savings associated with behavioral changes by both commercial and residential customers. The analysis for both customer segments is provided in Appendix B.

The 2013 evaluation indicates that 2013 energy consumption compared to the baseline year of 2008 has produced 602 kWh of average annual savings for residential customers. The 2013 savings are equivalent to 2012 savings of 594 kWh / participant. Otter Tail believes the efforts made by the SE/EC are driving these continued savings in the residential segment.

The 2013 evaluation for Rothsay's non-residential customers resulted in an average savings of 1,812 kWh per customer. This reflects a 25 percent decrease from the 2,423 kWh savings reported in 2012. The Company believes these sustained savings are a direct result of ongoing energy efficiency efforts by the Company and the community, and is extremely valuable information in determining how behavioral savings can be maintained over time.

Direct impact savings associated with technology installation were included in 2010, so no additional savings have been included in 2013. However, energy savings from community wide behavioral change has been included in 2013. Ongoing customer service and evaluation costs for the pilot have also been included in 2013.

In addition to project evaluation work completed in 2013, Otter Tail proposes continued evaluation through 2014 to evaluate and monitor the sustainability of behavioral changes that impact energy use. We appreciate the opportunity to learn from this pilot as we work to achieve Minnesota's energy savings goals.

CARRYING COSTS

Charges totaled \$237,858.79 for carrying costs on the balance of the CIP Tracker, as shown in Appendix A, Table 1.

The Commission and Otter Tail have agreed that allowing carrying charges to be added to the CIP Tracker Account will compensate the Company for the time value of the money invested in CIP programs.

As set in the Commission's Order, the monthly carrying charge is equivalent to the Company's currently approved rate of return, and with Commission approval, will be applied to the CIP Tracker Account Balance adjusted for related accumulated deferred income taxes.

Otter Tail does not count the carrying costs charges toward the spending requirement (see Appendix A, Table 5 Status Report Recap), but does include the charges in the CIP Tracker for recovery.

Conservation Cost Recovery Adjustment

CONSERVATION COST RECOVERY ADJUSTMENT

This filing constitutes the 20th Annual Filing to Update the Conservation Improvement Project (“CIP”) Rider (“Annual Filing”) that Otter Tail Power Company (“Otter Tail”, “Company”) has made with the Minnesota Public Utilities Commission (“Commission”, “PUC”) to update the CIP Rider adjustment, more commonly referred to as the Conservation Cost Recovery Adjustment (“CCRA”).

The CCRA may be adjusted annually by approval of the Commission. The recoverable CIP tracker balance is determined as described below, starting with the Commission accepted CIP tracker account balance as of the end of the prior year. The following adjustments are made from this starting point:

1. Add financial incentives awarded by the Commission not reflected in the prior year-end CIP tracker balance;
2. Add current year CIP approved spending levels;
3. Subtract current year CIP cost recovery through base rates as estimated based on Company’s projected retail sales.

All costs appropriately charged to the CIP tracker account shall be eligible for recovery through this rider and all revenues received from the application of the CCRA shall be credited to the CIP tracker account. Table 1 illustrates the history of the CCRA charge.

Table 1

Year (July 1 - June 30)	CIP Surcharge / CCRA Factor	Previous Year Ending Tracker Balance
1995 / 1996	0.503%	\$2,503,100
1996 / 1997	1.25%	\$582,920
1997 / 1998	1.75%	\$805,804
1998 / 1999	2.75%	\$925,213
1999 / 2000	1.50%	\$903,925
2000 / 2001	0.75%	\$1,117,853
2001 / 2002	0.65%	\$739,796
2002 / 2003	0.65%	\$1,059,412
2003 / 2004	0.50%	\$843,909
2004 / 2005	0.50%	\$881,730
2005 / 2006	0.75%	\$1,203,180
2006 / 2007	0.75%	\$1,063,660
2007 / 2008	0.75%	\$1,035,608
2008 / 2009	0.50%	\$490,714
2009 / 2010	1.75%	\$265,057
2010 / 2011	3.00%	\$1,927,314
2011 / 2012	3.00% / 3.80%	\$3,721,665
2012 / 2013	3.80% / \$0.00142/kWh	\$5,188,129
2013 / 2014	\$0.00175/kWh	\$3,572,621
2014 / 2015	\$0.00209	\$4,835,558

Otter Tail has included the CIP tracker, Exhibit 1, which uses the Commission approved per-kWh method from July 2014 through June 2015. For July 2014 through June 2015, Otter Tail is proposing to change the surcharge to \$0.00209/kWh. Exhibit 2 illustrates the monthly impacts for each of the Company's ten rate classes.

Calculation of CCRA and Conservation Cost Recovery Charge (“CCRC”)

During the 18 month period from end of year 2013 through the end of June 2015, Otter Tail plans to reduce the CIP Tracker balance of \$4,835,558 to an estimated \$4,263,408 illustrated in Table 2 below. In addition, Otter Tail estimates the following impacts to the CIP Tracker balance during the 18 month period:

- \$12,239,070 of additional expenses from Carrying charges, CIP Incentive and CIP Program expenses
- \$5,962,968 collected from the CCRC
- \$6,848,252 collected from the CCRA, of which \$4,804,671 will be collected during the 12 months from July 2014 – June 2015

Table 2

	Jan. 2014 - June 2014	July 2014 - June 2015
Beginning Balance	\$4,835,558	\$2,912,806
Carrying Charges	\$162,403	\$487,263
CIP Program Expenses	\$1,967,309	\$5,595,495
CIP Incentive Proposed	0	\$4,026,600
CCRC through Base Rates	-\$2,008,884	-\$3,954,084
CCRA - CIP Rider	-\$2,043,581	-\$4,804,671
Ending Balance	\$2,912,806	\$4,263,408
CCRA Method	\$0.00175/kWh	\$0.00209/ kWh

As illustrated in Exhibit 1, the proposed change in the surcharge will increase the CCRA by approximately 19 percent. This increase is needed to continue to manage the outstanding CIP tracker balance. By July 1, 2015 the CIP tracker balance is projected to decrease by approximately \$572,149 to \$4,263,408. The increase in the CCRA is a gradual approach at reducing the outstanding balance. Otter Tail is cognizant of customer bill impacts while reducing the CIP tracker to the extent possible.

The amounts on lines 4 and 5 of Exhibit 1 reflect the projected expenditures and financial incentive for 2014 through June 2015. Line 6 removes from the CIP tracker the portion of CIP costs that are included in base rates. The current base rate amount from January 2014 through June 2015 is calculated each month as forecasted retail sales

multiplied by the approved CCRC in base rates of \$0.00172 per kWh. This rate was approved in Otter Tail's last general rate case (Docket No. E017/GR-10-239).

As illustrated in Exhibit 2, all 10 rate classes will receive a 19 percent increase in the proposed CCRA. However, no rate class will see a *total bill increase* greater than one two-thirds of one percent. The largest monthly bill increase is for the Large General Service class, which will see an average increase of \$71.75 per month or a 0.55 percent total bill increase. Otter Tail's residential customers will see an average increase of \$0.28 per month.

The proposed 2013 CCRA is calculated assuming the rate is approved and is effective July 1, 2014. If implementation of the 2014 CCRA occurs after July 1, 2014, the CCRA may need to be adjusted to recover the approved revenue requirements over the remaining months of the period, through June 2015. This approach would ensure cost recovery and approved eligible costs match. If it is necessary to adjust the CCRA, Otter Tail proposes to calculate the final 2014 CCRA and include it with the corresponding rate schedule pages in a compliance filing in this docket.

The redline and final versions of the CIP rider rate schedules are included immediately following Exhibits 1 and 2. The CIP rider rate schedule included in this filing accommodates the change to the CCRA based on the proposed \$0.00209 per-kWh method of recovery. Once the 2014/2015 CCRA is approved, the Otter Tail will file the corresponding rate schedule that complies with the Commission's Order in this docket.

Otter Tail Power Company

CIP TRACKER AND CALCULATION OF PROPOSED CCRA

-based on projected 2014 sales and 2013 financial incentive

Exhibit 1

Page 1 of 1

	January 2014	February* 2014	March 2014	April 2014	May 2014	June 2014	Total						
1 Beginning of Period Balance	\$4,835,558	\$4,282,914	\$3,858,225	\$3,446,738	\$3,198,152	\$3,012,975							
2 Monthly Carrying Charge	0.72%	0.72%	0.72%	0.72%	0.72%	0.72%							
3 Monthly Carrying Charge	\$34,695	\$30,730	\$27,683	\$24,730	\$22,947	\$21,618	\$162,403						
4 CIP Program Charges	\$243,419	\$338,618	\$225,458	\$357,342	\$351,492	\$450,980	\$1,967,309						
5 CIP Incentive							\$0						
6 Less: CIP Recovery thru Base Rates	-\$411,864	-\$393,678	-\$329,441	-\$312,603	-\$277,389	-\$283,908	-\$2,008,884						
7 Less: Conservation Adjustment (CIP Revenue)	-\$418,894	-\$400,358	-\$335,187	-\$318,055	-\$282,227	-\$288,860	-\$2,043,581						
8 End of Period Balance	\$4,282,914	\$3,858,225	\$3,446,738	\$3,198,152	\$3,012,975	\$2,912,806							
9 CCRA through June 2014	\$0.00175												
10 Projected sales (kWh)	239,456,033	228,882,742	191,535,304	181,745,662	161,272,399	165,062,680							
11 CCRC / kWh	\$0.00172	\$0.00172	\$0.00172	\$0.00172	\$0.00172	\$0.00172							
	July 2014	August 2014	September 2014	October 2014	November 2014	December 2014	January 2015	February 2015	March 2015	April 2015	May 2015	June 2015	Total
1 Beginning of Period Balance	\$2,912,806	\$6,768,464	\$6,498,969	\$6,477,184	\$6,497,115	\$6,192,416	\$6,648,564	\$6,128,280	\$5,561,926	\$5,056,707	\$4,718,171	\$4,450,613	
2 Monthly Carrying Charge Rate	0.72%	0.72%	0.72%	0.72%	0.72%	0.72%	0.72%	0.72%	0.72%	0.00%	0.00%	0.00%	
3 Monthly Carrying Charge	\$20,899	\$48,564	\$46,630	\$46,474	\$46,617	\$44,431	\$47,703	\$43,970	\$39,907	\$36,282	\$33,853	\$31,933	\$487,263
4 CIP Program Charges	\$480,634	\$374,799	\$599,666	\$622,799	\$376,389	\$1,207,142	\$293,196	\$255,598	\$225,458	\$357,342	\$351,492	\$450,980	\$5,595,495
5 CIP Incentive	\$4,026,600												\$4,026,600
6 Less: CIP Recovery thru Base Rates	-\$303,585	-\$312,786	-\$301,601	-\$293,141	-\$328,518	-\$359,089	-\$388,776	-\$390,915	-\$347,875	-\$330,529	-\$294,749	-\$302,520	-\$3,954,084
7 Less: Conservation Adjustment (CIP Revenue)	-\$368,891	-\$380,072	-\$366,480	-\$356,201	-\$399,187	-\$436,335	-\$472,407	-\$475,007	-\$422,709	-\$401,631	-\$358,154	-\$367,597	-\$4,804,671
8 End of Period Balance	\$6,768,464	\$6,498,969	\$6,477,184	\$6,497,115	\$6,192,416	\$6,648,564	\$6,128,280	\$5,561,926	\$5,056,707	\$4,718,171	\$4,450,613	\$4,263,408	
9 CCRA PROPOSED (\$ / kWh)	\$0.00209												
10 Projected sales (kWh)	176,502,660	181,852,458	175,349,218	170,431,006	190,998,588	208,772,892	226,032,294	227,276,122	202,252,917	192,168,059	171,365,689	175,883,876	
11 CCRC / kWh	\$0.00172	\$0.00172	\$0.00172	\$0.00172	\$0.00172	\$0.00172	\$0.00172	\$0.00172	\$0.00172	\$0.00172	\$0.00172	\$0.00172	

*Actual data was used through February 2014, forecast used thereafter.

Otter Tail Power Company
Comparison of Monthly Bill Impacts

Exhibit 2

CIP Surcharge (CCRA) is based on \$0.00209 / kWh

Rate Class	*Average Data		Monthly Impacts		
			Current	Proposed	
Residential	825 avg. kWh/bills		\$1.44	\$0.28	Monthly Bill \$ Change
	\$82.12 avg. \$ / bill before CCRA	Proposed	\$1.72	0.34%	Monthly Bill % Change
Farm	2,193 avg. kWh/bills		\$3.84	\$0.75	Monthly Bill \$ Change
	\$191.52 avg. \$ / bill before CCRA	Proposed	\$4.58	0.38%	Monthly Bill % Change
General Service	2,644 avg. kWh/bills		\$4.63	\$0.90	Monthly Bill \$ Change
	\$235.45 avg. \$ / bill before CCRA	Proposed	\$5.53	0.37%	Monthly Bill % Change
Large General Serv.	211,031 avg. kWh/bills		\$369.30	\$71.75	Monthly Bill \$ Change
	\$12,728.51 avg. \$ / bill before CCRA	Proposed	\$441.05	0.55%	Monthly Bill % Change
Irrigation	1,858 avg. kWh/bills		\$3.25	\$0.63	Monthly Bill \$ Change
	\$123.44 avg. \$ / bill before CCRA	Proposed	\$3.88	0.50%	Monthly Bill % Change
Outdoor Lighting	83 avg. kWh/bills		\$0.14	\$0.03	Monthly Bill \$ Change
	\$11.61 avg. \$ / bill before CCRA	Proposed	\$0.17	0.24%	Monthly Bill % Change
Municipal Pumping	3,273 avg. kWh/bills		\$5.73	\$1.11	Monthly Bill \$ Change
	\$232.32 avg. \$ / bill before CCRA	Proposed	\$6.84	0.47%	Monthly Bill % Change
Water Heating, Cntrl	216 avg. kWh/bills		\$0.38	\$0.07	Monthly Bill \$ Change
	\$16.09 avg. \$ / bill before CCRA	Proposed	\$0.45	0.45%	Monthly Bill % Change
Interruptible Load	1,958 avg. kWh/bills		\$3.43	\$0.67	Monthly Bill \$ Change
	\$97.04 avg. \$ / bill before CCRA	Proposed	\$4.09	0.66%	Monthly Bill % Change
Deferred Load	1,857 avg. kWh/bills		\$3.25	\$0.63	Monthly Bill \$ Change
	\$96.40 avg. \$ / bill before CCRA	Proposed	\$3.88	0.63%	Monthly Bill % Change

*All average data comes from Otter Tail's approved rates in Schedule-E that was filed July 22, 2011 in compliance to the MN PUC's Order (Docket no. E017/GR-10-239), then adjusted for projected Rider Revenue.



Fergus Falls, Minnesota

Minnesota Public Utilities Commission
Section 13.02
ELECTRIC RATE SCHEDULE
Conservation Improvement Project (CIP) Rider

Page 1 of 2
~~Eleventh~~ Twelfth Revision

CONSERVATION IMPROVEMENT PROJECT (CIP) RIDER

DESCRIPTION	RATE CODE
Conservation Surcharge	31-530
CIP Exempt Adjustment Credit	31-532

RULES AND REGULATIONS: Terms and conditions of this electric rate schedule and the General Rules and Regulations govern use of this rider.

APPLICATION OF RIDER: This rider is applicable to any electric service under all of the Company's retail rate schedules, except for Standby Service, Section 11.01 and those customers who have been granted an exemption under a large customer facility. The exemptions are as follows:

"Large Customer Facility" customers that have been exempted from the Company's Conservation Improvement Program charges pursuant to Minn. Stat. 216B.241, Subd. 1a (b) shall receive a monthly exemption from conservation improvement program charges pursuant to Minn. Stat. 216B.16, subd. 6b Energy Conservation Improvement. Such monthly exemption will be effective beginning January 1 of the year following the grant of exemption. Upon exemption from conservation program charges, the "Large Customer Facility" customers can no longer participate in the Company's Energy Conservation Improvement Program.

CONSERVATION SURCHARGE AND EXEMPTION ADJUSTMENT: There shall be added to each non-exempt Customer's bill a Conservation Surcharge based on the applicable Conservation Surcharge Factor multiplied by the Customer's monthly energy use. The Conservation Surcharge shall not be applied to Meter(s) on Customer Account(s) granted exemption by the Commissioner of the Minnesota Department of Commerce, Division of Energy Resources (or successor agency) from CIP costs pursuant to Minn. Stat. 216B.241. Meter(s) on Customer Account(s) granted an exemption shall receive a Conservation Cost Recovery Charge (CCRC) Exemption Adjustment Credit.

The Conservation Surcharge Factor is \$0.~~00175-00209~~ per kWh.

C

DETERMINATION OF CONSERVATION SURCHARGE FACTOR: The Conservation Surcharge shall be the quotient of the Recoverable CIP Tracker Balance, divided by projected Minnesota non-exempt retail energy sales for a designated 12-month recovery period. The Surcharge may be adjusted annually by approval of the Minnesota Public Utilities Commission (MNPUC). The Recoverable CIP Tracker Balance is determined as described below, starting with the MNPUC accepted CIP Tracker account balance as of the end of the prior year. From this starting point:

1. Add financial incentives awarded by the MNPUC not reflected in the prior year-end CIP



Fergus Falls, Minnesota

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Conservation Improvement Project (CIP) Rider

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Tracker balance;

2. Add current year CIP approved spending levels;
3. Subtract current year CIP cost recovery through base rates as estimated based on Company's projected non-exempt retail sales.

All costs appropriately charged to the CIP Tracker account shall be eligible for recovery through this Rider and all revenues received from the application of the Conservation Surcharge Factor shall be credited to the CIP Tracker account.

DETERMINATION OF (CCRC): The CCRC is the amount included in base rates dedicated to the recovery of CIP costs as approved by the MNPUC in the Company's most recent general rate case. All revenues received from the application of the CCRC shall be credited to the CIP Tracker account. The CCRC is approved and applied on a per kWh basis by dividing the test-year CIP expenses by the test-year sales volumes (net of CIP-exempt volumes).

CCRC: \$0.00172 per kWh

DETERMINATION OF CCRC EXEMPTION ADJUSTMENT CREDIT:

For Meter(s) on Customer Account(s) granted a large customer facility exemption by the Commissioner of the Minnesota Department of Commerce, Division of Energy Resources (or successor agency) from CIP costs pursuant to Minn. Stat. 216B.241, the Conservation Surcharge Factor shall not apply and monthly bills will include a CCRC Exemption Adjustment Credit. The CCRC Exemption Adjustment Credit shall be determined by multiplying total billing exempt kWh by the applicable CCRC Exemption Adjustment Credit. For Meter(s) on Customers' Account(s) granted exemption by a decision of the Commissioner after the beginning of a calendar year shall be credited for any CIP collections billed after January 1st of the year following the Commissioner's decision. All credits associated with the CCRC Exemption Adjustment shall be included in the CIP Tracker account.

CCRC Exemption Adjustment Credit: \$0.00172 per kWh

MANDATORY AND VOLUNTARY RIDERS: The amount of a bill for service will be modified by any Mandatory Rate Riders that must apply and by any Voluntary Rate Riders selected by the Customer, unless otherwise noted in this schedule. See Sections 12.00, 13.00 and 14.00 of the Minnesota electric rates for the matrices of riders.



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Conservation Improvement Project (CIP) Rider

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CONSERVATION IMPROVEMENT PROJECT (CIP) RIDER

DESCRIPTION	RATE CODE
Conservation Surcharge	31-530
CIP Exempt Adjustment Credit	31-532

RULES AND REGULATIONS: Terms and conditions of this electric rate schedule and the General Rules and Regulations govern use of this rider.

APPLICATION OF RIDER: This rider is applicable to any electric service under all of the Company's retail rate schedules, except for Standby Service, Section 11.01 and those customers who have been granted an exemption under a large customer facility. The exemptions are as follows:

"Large Customer Facility" customers that have been exempted from the Company's Conservation Improvement Program charges pursuant to Minn. Stat. 216B.241, Subd. 1a (b) shall receive a monthly exemption from conservation improvement program charges pursuant to Minn. Stat. 216B.16, subd. 6b Energy Conservation Improvement. Such monthly exemption will be effective beginning January 1 of the year following the grant of exemption. Upon exemption from conservation program charges, the "Large Customer Facility" customers can no longer participate in the Company's Energy Conservation Improvement Program.

CONSERVATION SURCHARGE AND EXEMPTION ADJUSTMENT: There shall be added to each non-exempt Customer's bill a Conservation Surcharge based on the applicable Conservation Surcharge Factor multiplied by the Customer's monthly energy use. The Conservation Surcharge shall not be applied to Meter(s) on Customer Account(s) granted exemption by the Commissioner of the Minnesota Department of Commerce, Division of Energy Resources (or successor agency) from CIP costs pursuant to Minn. Stat. 216B.241. Meter(s) on Customer Account(s) granted an exemption shall receive a Conservation Cost Recovery Charge (CCRC) Exemption Adjustment Credit.

The Conservation Surcharge Factor is \$0.00209 per kWh.

C

DETERMINATION OF CONSERVATION SURCHARGE FACTOR: The Conservation Surcharge shall be the quotient of the Recoverable CIP Tracker Balance, divided by projected Minnesota non-exempt retail energy sales for a designated 12-month recovery period. The Surcharge may be adjusted annually by approval of the Minnesota Public Utilities Commission (MNPUC). The Recoverable CIP Tracker Balance is determined as described below, starting with the MNPUC accepted CIP Tracker account balance as of the end of the prior year. From this starting point:

1. Add financial incentives awarded by the MNPUC not reflected in the prior year-end CIP Tracker balance;



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Conservation Improvement Project (CIP) Rider

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2. Add current year CIP approved spending levels;
3. Subtract current year CIP cost recovery through base rates as estimated based on Company's projected non-exempt retail sales.

All costs appropriately charged to the CIP Tracker account shall be eligible for recovery through this Rider and all revenues received from the application of the Conservation Surcharge Factor shall be credited to the CIP Tracker account.

DETERMINATION OF (CCRC): The CCRC is the amount included in base rates dedicated to the recovery of CIP costs as approved by the MNPUC in the Company's most recent general rate case. All revenues received from the application of the CCRC shall be credited to the CIP Tracker account. The CCRC is approved and applied on a per kWh basis by dividing the test-year CIP expenses by the test-year sales volumes (net of CIP-exempt volumes).

CCRC: \$0.00172 per kWh

DETERMINATION OF CCRC EXEMPTION ADJUSTMENT CREDIT:

For Meter(s) on Customer Account(s) granted a large customer facility exemption by the Commissioner of the Minnesota Department of Commerce, Division of Energy Resources (or successor agency) from CIP costs pursuant to Minn. Stat. 216B.241, the Conservation Surcharge Factor shall not apply and monthly bills will include a CCRC Exemption Adjustment Credit. The CCRC Exemption Adjustment Credit shall be determined by multiplying total billing exempt kWh by the applicable CCRC Exemption Adjustment Credit. For Meter(s) on Customers' Account(s) granted exemption by a decision of the Commissioner after the beginning of a calendar year shall be credited for any CIP collections billed after January 1st of the year following the Commissioner's decision. All credits associated with the CCRC Exemption Adjustment shall be included in the CIP Tracker account.

CCRC Exemption Adjustment Credit: \$0.00172 per kWh

MANDATORY AND VOLUNTARY RIDERS: The amount of a bill for service will be modified by any Mandatory Rate Riders that must apply and by any Voluntary Rate Riders selected by the Customer, unless otherwise noted in this schedule. See Sections 12.00, 13.00 and 14.00 of the Minnesota electric rates for the matrices of riders.

Appendix A- Tables

**Table 1 -
CALCULATION OF CARRYING CHARGE ON CONSERVATION DOLLARS - CIP TRACKER
Financial Incentive Project - Conservation Improvement Programs
Otter Tail Power Company**

	Capital Expenditures (A)	Operating Expenses (B)	Revenues Received (C)	Dr. 1860.3100 Cr. 4310.4000 Carrying Charge 8.61% (D)	Balance Account 1860.3000 + 1860.3100 (E)
Balance Dec. 31, 2012	0.00	58,583,390.97	(55,869,668.80)	443,991.75	3,572,620.85
January:					
Carrying Charge	--	--	--	25,633.55	25,633.55
Trf Carrying Charge Bal					0.00
Labor Accrual Adj					0.00
Activity	0.00	164,614.76	(671,312.99)	--	(506,698.23)
Deferred Taxes	--	--	--	--	--
Balance January 31, 2013	0.00	58,748,005.73	(56,540,981.79)	469,625.30	3,091,556.17
February:					
Carrying Charge	--	--	--	22,181.92	22,181.92
Labor Accrual Adj					0.00
Activity	0.00	275,007.73	(676,600.76)	--	(401,593.03)
Deferred Taxes	--	--	--	--	--
Balance February 28, 2013	0.00	59,023,013.46	(57,217,582.55)	491,807.22	2,712,145.06
March:					
Carrying Charge	--	--	--	19,459.64	19,459.64
Labor Accrual Adj					
Activity	0.00	584,529.31	(586,513.57)	--	(1,984.26)
Deferred Taxes	--	--	--	--	--
Balance March 31, 2013	0.00	59,607,542.77	(57,804,096.12)	511,266.86	2,729,620.44
April:					
Carrying Charge	--	--	--	19,585.03	19,585.03
Labor Accrual Adj					
Activity	0.00	273,875.81	(582,778.69)	--	(308,902.88)
Deferred Taxes	--	--	--	--	--
Balance April 30, 2013	0.00	59,881,418.58	(58,386,874.81)	530,851.89	2,440,302.59
May:					
Carrying Charge	--	--	--	17,509.17	17,509.17
Lost Margin & Bonus/Incentive					0.00
Labor Accrual Adj					
Activity	0.00	268,541.06	(493,114.76)	--	(224,573.70)
Deferred Taxes	--	--	--	--	--
Balance May 31, 2013	0.00	60,149,959.64	(58,879,989.57)	548,361.06	2,233,238.06
June:					
Carrying Charge	--	--	--	16,023.48	16,023.48
Bonus/Incentive					0.00
Labor Accrual Adj					
Activity	0.00	525,741.93	(468,041.69)	--	57,700.24
Deferred Taxes	--	--	--	--	--
Balance June 30, 2013	0.00	60,675,701.57	(59,348,031.26)	564,384.54	2,306,961.78
July:					
Carrying Charge	--	--	--	16,552.45	16,552.45
Bonus/Incentive					0.00
Labor Accrual Adj					
Activity	0.00	267,923.78	(509,727.13)	--	(241,803.35)
Deferred Taxes	--	--	--	--	--
Balance July 31, 2013	0.00	60,943,625.35	(59,857,758.39)	580,936.99	2,081,710.88
August:					
Carrying Charge	--	--	--	14,936.28	14,936.28
Bonus/Incentive					0.00
Labor Accrual Adj					
Activity	0.00	276,328.06	(528,729.71)	--	(252,401.65)
Deferred Taxes	--	--	--	--	--
Balance August 31, 2013	0.00	61,219,953.41	(60,386,488.10)	595,873.27	1,844,245.51
September:					
Carrying Charge	--	--	--	13,232.46	13,232.46
Lost Margin & Bonus/Incentive					0.00
Labor Accrual Adj					
Activity	0.00	412,944.21	(536,732.01)	--	(123,787.80)
Deferred Taxes	--	--	--	--	--
Balance Sept. 30, 2013	0.00	61,632,897.62	(60,923,220.11)	609,105.73	1,733,690.17
October:					
Carrying Charge	--	--	--	12,439.23	12,439.23
Lost Margin & Bonus/Incentive		2,681,575.00			2,681,575.00
Labor Accrual Adj					
Activity	0.00	355,388.15	(491,166.17)	--	(135,778.02)
Deferred Taxes	--	--	--	--	--
Balance Oct. 31, 2013	0.00	64,669,860.77	(61,414,386.28)	621,544.96	4,291,926.38
November:					
Carrying Charge	--	--	--	27,296.67	27,296.67
Labor Accrual Adj					
Activity	0.00	443,797.39	(649,987.34)	--	(206,189.95)
Deferred Taxes	--	--	--	--	--
Balance Nov. 30, 2013	0.00	65,113,658.16	(62,064,373.62)	648,841.63	4,113,033.10
December:					
Carrying Charge	--	--	--	33,008.91	33,008.91
Lost Margin & Bonus/Incentive		0.00			0.00
Labor Accrual Adj					
Activity	0.00	1,405,242.32	(715,726.56)	--	689,515.76
Deferred Taxes	--	--	--	--	--
Balance Dec. 31, 2013	0.00	66,518,900.48	(62,780,100.18)	681,850.54	4,835,557.77

* Rate of return allowed in Otter Tail's general rate case, Docket No. E017/GR-10-239, effective with final rates October 1, 2011.

Table 2 - A
2013 INCENTIVE MECHANISM - PRE-YEAR INCENTIVE CALCULATION FIGURES
Financial Incentive Project
Otter Tail Power Company

3-year Weather-Normalized Sales Average:	2,142,354,181	
1.0% of Sales:	21,423,542	From Utility's Tri/Biennial filing
For CIP Budget, Energy Goal, and Estimated Benefits, include only those modifications that were required by the Commissioner's Order or which the utility notified the OES that it planned to include in the incentive calculation upon approval. Include a summary of the modifications below.		
Approved CIP Budget:	\$4,205,522	From Commissioner's Order approving Triennial Filing April 11, 2011
Approved CIP Energy Goal:	31,738,044	From Commissioner's Order approving Triennial Filing April 11, 2011
Estimated Net Benefits at Approved Goal:	\$23,480,530	From Commissioner's Order approving Triennial Filing April 11, 2011
Modifications:		
Budget		\$990,378 DER approved budget increase request on December 18, 2013.
Energy	None	
Net Benefits	None	
Include the budget and energy goal changes for each modification included.		
A single entry for net benefits reflecting the combined impact of all included modifications is sufficient.		
OTP INPUTS INDICATED IN YELLOW		

OTTER TAIL POWER COMPANY
for 2013

Inputs:

Average Sales:	2,142,354,181
1.0% Energy Savings:	21,423,542
Historic Average Savings:	0.73% 2004-2008
Earning Threshold:	0.30% plus one unit of energy
Earning Threshold in Energy Savings:	6,427,064
Award zero point:	0.20%
Award zero point in Energy Savings:	4,284,708
Steps from zero point to 1.5%	13
Size of steps in Energy Savings:	2,142,354

Incentive Calibration:

Average Incentive per unit at 1.5%:	\$0.09	Set by Commission in approval of incentive mechanism & calibration
Incentive Cap:	\$0.113	125% of incentive per kwh
Energy savings at 1.5%:	32,135,313	
Targeted incentive at 1.5%:	\$2,892,178	
Multiplier:	0.00936	Percent of Net Benefits received for every 0.1% of sales saved

Table 2 - A
2013 INCENTIVE MECHANISM - PRE-YEAR INCENTIVE CALCULATION FIGURES
Financial Incentive Project
Otter Tail Power Company

Estimated Incentive Levels:

Achievement Level (% of sales)	Energy Saved	Percent of Benefits Awarded - Linear	Net Benefits - Linear	Financial Incentive - Linear	Incentive Award- Linear Proposal, \$0.11/kWh Cap	Average Incentive per unit Saved
0.00%	0	0.000%	\$0	\$0	\$0	\$0.0000
0.10%	2,142,354	0.000%	\$1,584,963	\$0	\$0	\$0.0000
0.20%	4,284,708	0.000%	\$3,169,925	\$0	\$0	\$0.0000
0.30%	6,427,063	0.000%	\$4,754,888	\$0	\$0	\$0.0000
0.40%	8,569,417	1.872%	\$6,339,850	\$118,653	\$118,653	\$0.0138
0.50%	10,711,771	2.807%	\$7,924,813	\$222,475	\$222,475.24	\$0.0208
0.60%	12,854,125	3.743%	\$9,509,775	\$355,960	\$355,960.39	\$0.0277
0.70%	14,996,479	4.679%	\$11,094,738	\$519,109	\$519,108.90	\$0.0346
0.80%	17,138,833	5.615%	\$12,679,701	\$711,921	\$711,920.77	\$0.0415
0.90%	19,281,188	6.550%	\$14,264,663	\$934,396	\$934,396.02	\$0.0485
1.00%	21,423,542	7.486%	\$15,849,626	\$1,186,535	\$1,186,534.62	\$0.0554
1.10%	23,565,896	8.422%	\$17,434,588	\$1,468,337	\$1,468,336.60	\$0.0623
1.20%	25,708,250	9.358%	\$19,019,551	\$1,779,802	\$1,779,801.93	\$0.0692
1.30%	27,850,604	10.294%	\$20,604,513	\$2,120,931	\$2,120,930.64	\$0.0762
1.40%	29,992,959	11.229%	\$22,189,476	\$2,491,723	\$2,491,722.71	\$0.0831
1.50%	32,135,313	12.165%	\$23,774,438	\$2,892,178	\$2,892,178.14	\$0.0900
1.60%	34,277,667	13.101%	\$25,359,401	\$3,322,297	\$3,322,296.95	\$0.0969
1.67%	35,792,002	13.762%	\$32,764,856	\$4,509,200	\$4,026,600.22	\$0.1125
1.70%	36,420,021	14.037%	\$26,944,364	\$3,782,079	\$3,782,079.11	\$0.1038
1.80%	38,562,375	14.972%	\$28,529,326	\$4,271,525	\$4,271,524.64	\$0.1108
1.90%	40,704,729	15.908%	\$30,114,289	\$4,790,634	\$4,579,282.06	\$0.1125
2.00%	42,847,084	16.844%	\$31,699,251	\$5,339,406	\$4,820,296.91	\$0.1125
2.10%	44,989,438	17.780%	\$33,284,214	\$5,917,841	\$5,061,311.75	\$0.1125
2.20%	47,131,792	18.715%	\$34,869,176	\$6,525,940	\$5,302,326.60	\$0.1125
2.30%	49,274,146	19.651%	\$36,454,139	\$7,163,703	\$5,543,341.44	\$0.1125
2.40%	51,416,500	20.587%	\$38,039,102	\$7,831,129	\$5,784,356.29	\$0.1125
2.50%	53,558,855	21.523%	\$39,624,064	\$8,528,218	\$6,025,371.13	\$0.1125
2.60%	55,701,209	22.459%	\$41,209,027	\$9,254,970	\$6,266,385.98	\$0.1125
2.70%	57,843,563	23.394%	\$42,793,989	\$10,011,386	\$6,507,400.82	\$0.1125
2.80%	59,985,917	24.330%	\$44,378,952	\$10,797,465	\$6,748,415.67	\$0.1125
2.90%	62,128,271	25.266%	\$45,963,914	\$11,613,208	\$6,989,430.52	\$0.1125
3.00%	64,270,625	26.202%	\$47,548,877	\$12,458,614	\$7,230,445.36	\$0.1125

Table 2 - B
2013 INCENTIVE MECHANISM - POST-YEAR INCENTIVE CALCULATION FIGURES
Financial Incentive Project
Otter Tail Power Company

Actual CIP Results for 2011

Spending:	\$5,253,935	From Utility Status Report
Energy Saved:	35,792,002	From Utility Status Report
Net Benefits Achieved:	\$32,764,856	From Utility Status Report

167% percent of the 1% goal achieved

Resulting Incentive:

Steps above Zero Point:	14.71
Percent of Net Benefits Awarded:	13.762% Linear

Financial Incentive Award:	\$4,026,600	Capped Incentive @ 11.25 cents/kWh
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OTP INPUTS INDICATED IN YELLOW

CALCULATED FINANCIAL INCENTIVE AWARD IN GREEN

Table 3
2013 PROJECT COSTS, SAVINGS, AND BENEFITS
Financial Incentive Project
Otter Tail Power Company

	2013 PROPOSED SAVINGS, COSTS AND BENEFITS					2013 ACTUAL SAVINGS, COSTS AND BENEFITS			
	ENERGY SAVINGS	TOTAL COSTS	TOTAL BENEFITS	NET BENEFITS		ENERGY SAVINGS	TOTAL COSTS	TOTAL BENEFITS	NET BENEFITS
Residential									
Air Conditioning Control	3,660	\$37,500	\$152,076	\$114,576		4,929	\$55,313	\$204,795	\$149,483
Air Source Heat Pumps	1,215,825	\$113,000	\$1,208,232	\$1,095,232		818,376	\$85,573	\$813,265	\$727,692
Appliance Recycling	294,013	\$77,000	\$185,912	\$108,912		393,830	\$109,422	\$249,030	\$139,608
Be Bright - Change A Light	1,181,381	\$90,000	\$993,035	\$903,035		2,291,091	\$99,560	\$1,805,730	\$1,706,170
Energy Feedback Program	2,708,033	\$391,400	\$889,931	\$498,531		2,396,070	\$355,101	\$729,217	\$374,116
Geothermal Heat Pumps	296,979	\$64,000	\$504,963	\$440,963		344,000	\$72,555	\$605,017	\$532,462
Home Insulation	430,000	\$66,000	\$499,341	\$433,341		47,476	\$14,671	\$55,132	\$40,461
Residential Demand Control	14,945	\$29,000	\$290,687	\$261,687		0	\$6,299	\$0	(\$6,299)
Advertising & Education	NA	\$146,500	\$0	(\$146,500)		NA	\$145,721	\$0	(\$145,721)
Financing	NA	\$13,000	\$0	(\$13,000)		NA	\$6,816	\$0	(\$6,816)
Implementation & Training	NA	\$40,000	\$0	(\$40,000)		NA	\$35,042	\$0	(\$35,042)
Total - Residential	6,144,835	1,067,400	4,724,177	\$3,656,777		6,295,773	986,073	4,462,186	\$3,476,113
Commercial									
Adjustable Speed Drives	2,187,625	\$151,000	\$2,248,399	\$2,097,399		6,408,181	\$362,696	\$6,586,204	\$6,223,508
Air Conditioning Control - Commercial	732	\$25,500	\$68,191	\$42,691		98	\$6,986	\$9,094	\$2,108
Air Source Heat Pumps	712,725	\$63,000	\$791,298	\$728,298		592,555	\$55,619	\$699,407	\$643,788
Business Education	104,221	\$11,000	\$20,835	\$9,835		293,099	\$8,720	\$24,044	\$15,324
Commercial Design Assistance (SB2030)	2,080,125	\$371,000	\$2,698,866	\$2,327,866		1,559,521	\$288,141	\$2,023,406	\$1,735,265
Geothermal Heat Pumps	831,351	\$163,000	\$1,164,079	\$1,001,079		851,224	\$167,897	\$1,174,284	\$1,006,387
Grant	5,643,750	\$540,000	\$6,500,248	\$5,960,248		6,017,977	\$665,624	\$7,778,651	\$7,113,027
Lighting	6,086,241	\$669,002	\$6,798,918	\$6,129,916		10,090,936	\$1,535,080	\$11,717,440	\$10,182,360
Lighting - New Construction	191,689	\$31,395	\$220,485	\$189,090		1,456,612	\$91,105	\$1,711,257	\$1,620,152
Motors	146,354	\$65,725	\$166,149	\$100,424		524,613	\$102,391	\$539,187	\$436,796
Plan Review	1,371,917	\$106,000	\$1,779,999	\$1,673,999		0	\$1,009	\$0	(\$1,009)
Refrigeration	453,846	\$65,000	\$266,172	\$201,172		1,288,536	\$174,178	\$1,009,255	\$835,077
Advertising & Education	NA	\$25,000	\$0	(\$25,000)		NA	\$3,582	\$0	(\$3,582)
Compressed Air Audits	NA	\$20,000	\$0	(\$20,000)		NA	\$12,006	\$0	(\$12,006)
Financing	NA	\$32,000	\$0	(\$32,000)		NA	\$6,816	\$0	(\$6,816)
Implementation & Training	NA	\$60,000	\$0	(\$60,000)		NA	\$42,417	\$0	(\$42,417)
DER Approved Commercial Budget Modification Dec. 18, 2013		\$990,378		(\$990,378)					
Total - Commercial	19,810,576	3,389,000	22,723,640	19,334,640		29,083,351	3,524,267	\$33,272,229	\$29,747,962
On For Conservation									
Town Energy Challenge -INACTIVE	0	\$0	\$0	\$0		104,967	\$13,386	\$32,075	\$18,689
Campus Energy Challenge - INACTIVE	0	\$0	\$0	\$0		0	\$0	\$0	\$0
Total - On For Conservation	0	0	0	\$0		104,967	\$13,386	\$32,075	\$18,689
Low-Income									
House Therapy	367,300	\$150,000	\$306,427	\$156,427		307,911	\$142,054	\$252,301	\$110,247
Program Development & Regulatory Requirements									
Program Development	0	\$500,000	\$0	(\$500,000)		0	\$483,939	\$0	(\$483,939)
PUC Assessments	0	\$90,000	\$0	(\$90,000)		0	\$6,181	\$0	(\$6,181)
Regulatory Assessments (NGEA)	0	\$25,000	\$0	(\$25,000)		0	\$95,687	\$0	(\$95,687)
Total - Development & Regulatory Requirements	0	\$615,000	\$0	(\$615,000)		0	\$585,807	\$0	(\$585,807)
Miscellaneous Projects									
Company CIP Projects	0	\$0	\$0	\$0		0	\$2,366	\$0	(\$2,366)
Accounting Adjustments	0	\$0	\$0	\$0		0	(\$17)	\$0	\$17
Total - All CIP	26,322,711	5,221,400	27,754,244	22,532,844		35,792,002	5,253,935	38,018,791	\$32,764,856

All numbers are for a single year - 2013. DSMORE software was used for the analysis, with figures discounted to 2013.

TABLE 4
2013 BENEFIT COST RATIOS - DIRECT IMPACT & TOTAL CIP
Financial Incentive Project
Otter Tail Power Company

#

	AS FILED - 2013 PROPOSED BENEFIT/COST RATIOS					ACTUAL - 2013 BENEFIT/COST RATIOS				
	Utility Test	TRC Test	RIM Test	Societal Test	Participant Test	Utility Test	TRC Test	RIM Test	Societal Test	Participant Test
Residential										
Air Conditioning Control	4.06	5.08	3.70	5.08	inf.	3.70	4.64	3.41	4.64	inf.
Air Source Heat Pumps	10.69	6.08	1.14	6.31	4.99	9.50	5.28	1.12	5.47	4.62
Appliance Recycling	2.41	3.46	0.82	3.59	inf.	2.28	3.26	0.80	3.39	inf.
Be Bright - Change A Light	11.03	9.70	1.17	10.05	13.57	18.14	12.63	1.18	13.10	13.83
Energy Feedback Program	2.27	2.28	0.78	2.37	inf.	2.05	2.05	0.75	2.13	inf.
Geothermal Heat Pumps	7.89	2.07	1.50	2.12	1.15	8.34	2.80	1.56	2.86	1.51
Home Insulation	7.57	2.64	1.09	2.74	2.21	3.76	1.52	0.58	1.62	2.57
Residential Demand Control	10.02	10.10	2.42	10.25	4.08	NA	NA	NA	NA	NA
Advertising & Education	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Financing	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Implementation & Training	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total - Residential	4.43	3.25	1.03	3.36	4.58	4.53	3.79	1.04	3.92	6.47
Commercial										
Adjustable Speed Drives	14.89	2.04	1.29	2.11	1.34	18.16	3.91	1.31	4.04	2.53
Air Conditioning Control - Commercial	1.88	3.80	1.84	3.80	inf.	1.30	1.83	1.28	1.83	inf.
Air Source Heat Pumps	12.56	8.09	1.24	8.37	6.22	12.57	3.46	1.31	3.57	2.41
Business Education	1.89	4.24	0.72	4.41	inf.	2.76	2.96	0.81	3.08	inf.
Commercial Design Assistance (SB2030)	7.27	2.55	1.27	2.63	1.78	7.02	12.88	1.47	13.20	inf.
Geothermal Heat Pumps	7.14	1.83	1.39	1.88	1.14	6.99	5.88	0.84	6.17	6.44
Grant	12.04	2.58	1.43	2.65	1.47	11.69	4.73	1.54	4.85	2.47
Lighting	10.16	4.13	1.24	4.27	3.01	7.63	2.85	1.16	2.95	2.16
Lighting - New Construction	7.02	2.40	1.18	2.48	1.86	18.78	1.82	1.28	1.88	1.22
Motors	2.53	1.82	0.98	1.87	1.74	5.27	4.46	1.12	4.60	3.78
Plan Review	16.79	8.20	1.27	8.48	6.17	NA	NA	NA	NA	NA
Refrigeration	4.09	3.56	1.00	3.68	5.79	5.79	5.72	1.09	5.92	5.79
Advertising & Education	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Compressed Air Audits	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Financing	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Implementation & Training	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total - Commercial*	9.47	2.83	1.25	2.92	1.98	9.44	3.60	1.27	3.71	2.47
On For Conservation - INACTIVE										
Town Energy Challenge -INACTIVE	NA	NA	NA	NA	NA	2.40	2.40	0.79	2.49	inf.
Campus Energy Challenge - INACTIVE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total - On For Conservation	NA	NA	NA	NA	NA	2.40	2.40	0.79	2.49	inf.
Low-Income										
House Therapy	2.04	2.35	0.80	2.44	inf.	1.78	9.45	0.75	9.79	inf.
Program Development And Regulatory Requirements										
Program Development	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PUC Assessments	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Regulatory Assessments (NGEA)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total - Development & Regulatory Requirements	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total - All CIP*	6.56	2.85	1.20	2.92	2.26	7.24	3.47	1.21	3.59	2.70

All numbers are for a single year - 2013. DSMORE software was used for the analysis, with figures discounted to 2013.

*Proposed Costs and Net Benefits do not include the \$990,378 commercial sector budget modification approved by DER December, 18, 2013.

Table 5
2013 CIP PROGRAM STATUS REPORT / CIP TRACKER RECAP
Financial Incentive Project -- 2013 Conservation Improvement Programs
Otter Tail Power Company

	2013 EXPENDITURES			2013 PARTICIPATION			2013 ENERGY SAVINGS - KWH			2013 COINCIDENT DEMAND SAVINGS - KW		
	ACTUAL	BUDGET	% GOAL	ACTUAL	BUDGET	% GOAL	ACTUAL	BUDGET	% GOAL	ACTUAL	BUDGET	% GOAL
RESIDENTIAL PROGRAMS												
Air Conditioning Control	\$55,313	\$37,500	148%	101	75	135%	4,929	3,660	135%	97.7	72.6	135%
Air Source Heat Pumps	\$85,573	\$113,000	76%	105	145	72%	818,376	1,215,825	67%	113.8	169.0	67%
Appliance Recycling	\$109,422	\$77,000	142%	497	350	142%	393,830	294,013	134%	54.8	40.9	134%
Be Bright - Change A Light	\$99,560	\$90,000	111%	37,212	20,300	183%	2,291,091	1,181,381	194%	318.5	192.1	166%
Energy Feedback Program	\$355,101	\$391,400	91%	36,203	31,800	114%	2,396,070	2,708,033	88%	1,449.8	1,638.5	88%
Geothermal Heat Pumps	\$72,555	\$64,000	113%	22	25	88%	344,000	296,979	116%	264.2	215.0	123%
Home Insulation	\$14,671	\$66,000	22%	17	100	17%	47,476	430,000	11%	6.6	59.8	11%
Residential Demand Control	\$6,299	\$29,000	22%	0	25	0%	0	14,945	0%	0.0	195.2	0%
Advertising & Education	\$145,721	\$146,500	99%	69,273	3,600	1924%	NA	NA	NA	NA	NA	NA
Financing	\$6,816	\$13,000	52%	1	7	14%	NA	NA	NA	NA	NA	NA
Implementation & Training	\$35,042	\$40,000	88%	74	175	42%	NA	NA	NA	NA	NA	NA
TOTAL - RESIDENTIAL	\$986,073	\$1,067,400	92%	143,505	56,602	254%	6,295,773	6,144,835	102%	2,305.3	2,583.1	89%
COMMERCIAL PROGRAMS												
Adjustable Speed Drives	\$362,696	\$151,000	240%	121	65	186%	6,408,181	2,187,625	293%	792.1	270.4	293%
Air Conditioning Control - Commercial	\$6,986	\$25,500	27%	9	15	60%	98	732	13%	4.4	32.8	13%
Air Source Heat Pumps	\$55,619	\$63,000	88%	106	50	212%	592,555	712,725	83%	133.2	136.1	98%
Business Education	\$8,720	\$11,000	79%	3	5	60%	293,099	104,221	281%	36.2	19.9	182%
Commercial Design Assistance (SB2030)	\$288,141	\$371,000	78%	6	6	100%	1,559,521	2,080,125	NA	297.7	397.0	NA
Geothermal Heat Pumps	\$167,897	\$163,000	103%	18	60	30%	851,224	831,351	102%	191.4	563.3	34%
Grant	\$665,624	\$540,000	123%	51	30	170%	6,017,977	5,643,750	107%	1,318.6	967.5	136%
Lighting	\$1,535,080	\$669,002	229%	640	194	330%	10,090,936	6,086,241	166%	1,926.3	1,499.7	128%
Lighting - New Construction	\$91,105	\$31,395	290%	54	17	318%	1,456,612	191,689	760%	278.1	47.3	587%
Motors	\$102,391	\$65,725	156%	134	71	189%	524,613	146,354	358%	64.9	24.2	268%
Plan Review	\$1,009	\$106,000	1%	0	8	0%	0	1,371,917	0%	0.0	261.9	0%
Refrigeration	\$174,178	\$65,000	268%	59	24	246%	1,288,536	453,846	284%	246.0	86.6	284%
Advertising & Education	\$3,582	\$25,000	14%	84	100	84%	NA	NA	NA	NA	NA	NA
Compressed Air Audits	\$12,006	\$20,000	60%	2	4	50%	NA	NA	NA	NA	NA	NA
Financing	\$6,816	\$32,000	21%	0	5	0%	NA	NA	NA	NA	NA	NA
Implementation & Training	\$42,417	\$60,000	71%	359	250	144%	NA	NA	NA	NA	NA	NA
DER Approved Commercial Budget Modification Dec. 18, 2013		\$990,378										
TOTAL - COMMERCIAL	\$3,524,266.81	\$3,389,000	104%	1,646	904	182%	29,083,351	19,810,576	147%	5,288.9	4,306.8	123%
ON FOR CONSERVATION - INACTIVE												
Town Energy Challenge -INACTIVE	\$13,386	\$0	NA	366	0	NA	104,967	0	NA	62.3	0.0	NA
Campus Energy Challenge - INACTIVE	\$0	\$0	NA	0	0	NA	0	0	NA	0.0	0.0	NA
Total - On For Conservation	\$13,386	\$0	NA	366			104,967			62.3		

Table 5
2013 CIP PROGRAM STATUS REPORT / CIP TRACKER RECAP
Financial Incentive Project -- 2013 Conservation Improvement Programs
Otter Tail Power Company

	2013 EXPENDITURES			2013 PARTICIPATION			2013 ENERGY SAVINGS - KWH			2013 COINCIDENT DEMAND SAVINGS - KW		
	ACTUAL	BUDGET	% GOAL	ACTUAL	BUDGET	% GOAL	ACTUAL	BUDGET	% GOAL	ACTUAL	BUDGET	% GOAL
LOW INCOME												
House Therapy	\$142,054	\$150,000	95%	129	175	74%	307,911	367,300	84%	53.9	70.3	77%
PROG DEVELOPMENT & REGULATORY												
Program Development	\$483,939	\$500,000	97%	NA	NA	NA	NA	NA	NA	NA	NA	NA
PUC Assessments	\$6,181	\$90,000	7%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Regulatory Assessments (NGEA)	\$95,687	\$25,000	383%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total - Development & Regulatory	\$585,807	\$615,000	95%									
MISCELLANEOUS PROJECTS												
Company CIP Projects	\$2,366	\$0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Accounting Adjustments	-\$17	\$0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL - MISCELLANEOUS	\$2,349	\$0	NA									
TOTAL - 2013 CIP PROJECT COSTS	\$5,253,935	\$5,221,400	101%	145,646	57,681	253%	35,792,002	26,322,711	136%	7,710.3	6,960.2	111%
CIP TRACKER CARRYING COSTS	\$237,859											
TOTAL - 2013 CIP w/ CARRYING COSTS & REG. NGEA	\$5,491,794	\$5,221,400	105%	145,646	57,681	253%	35,792,002	26,322,711	136%	7,710.3	6,960.2	111%
INCENTIVES - 2013 [Bonus]	\$2,681,575											
CIP RECOVERY MECHANISM	-\$3,243,789											
RECOVERED THROUGH RATES (inc cc recovery)	-\$3,666,643											
PRIOR YEAR CARRY FORWARD BAL.	\$3,572,621											
TRACKER BALANCE - YEAR END 2013	\$4,835,558											

Table 6
2013 CIP PROGRAM STATUS REPORT / CIP TRACKER RECAP - COST PER KW / KWH
Financial Incentive Project -- 2013 Conservation Improvement Programs
Otter Tail Power Company

	2013 EXPENDITURES		2013 ENERGY SAVINGS - KWH		COST PER KWH		2013 COINCIDENT DEMAND SAVINGS - K		COST PER KW	
	ACTUAL	BUDGET	ACTUAL	BUDGET	ACTUAL	BUDGET	ACTUAL	BUDGET	ACTUAL	BUDGET
RESIDENTIAL PROGRAMS - DIRECT IMPACT										
Air Conditioning Control	\$55,313	\$37,500	4,929	3,660	\$11.22	\$10.24	98	73	\$566	\$517
Air Source Heat Pumps	\$85,573	\$113,000	818,376	1,215,825	\$0.10	\$0.09	114	169	\$752	\$669
Appliance Recycling	\$109,422	\$77,000	393,830	294,013	\$0.28	\$0.26	55	41	\$1,999	\$1,884
Be Bright - Change A Light	\$99,560	\$90,000	2,291,091	1,181,381	\$0.04	\$0.08	319	192	\$313	\$469
Energy Feedback Program	\$355,101	\$391,400	2,396,070	2,708,033	\$0.15	\$0.14	1,450	1,639	\$245	\$239
Geothermal Heat Pumps	\$72,555	\$64,000	344,000	296,979	\$0.21	\$0.22	264	215	\$275	\$298
Home Insulation	\$14,671	\$66,000	47,476	430,000	\$0.31	\$0.15	7	60	\$2,223	\$1,104
Residential Demand Control	\$6,299	\$29,000	0	14,945	\$0.00	\$1.94	0	195	#DIV/0!	\$149
TOTAL - RESIDENTIAL	\$798,493	\$867,900	6,295,773	6,144,835	\$0.13	\$0.14	2,305	2,583	\$346	\$336
COMMERCIAL PROGRAMS - DIRECT IMPACT										
Adjustable Speed Drives	\$362,696	\$151,000	6,408,181	2,187,625	\$0.06	\$0.07	792	270	\$458	\$558
Air Conditioning Control - Commercial	\$6,986	\$25,500	98	732	\$71.58	\$34.84	4	33	\$1,595	\$777
Air Source Heat Pumps	\$55,619	\$63,000	592,555	712,725	\$0.09	\$0.09	133	136	\$418	\$463
Business Education	\$8,720	\$11,000	293,099	104,221	\$0.03	\$0.11	36	20	\$241	\$553
Commercial Design Assistance (SB2030)	\$288,141	\$371,000	1,559,521	2,080,125	NA	NA	298	397	NA	NA
Geothermal Heat Pumps	\$167,897	\$163,000	851,224	831,351	\$0.20	\$0.20	191	563	\$877	\$289
Grant	\$665,624	\$540,000	6,017,977	5,643,750	\$0.11	\$0.10	1,319	968	\$505	\$558
Lighting	\$1,535,080	\$669,002	10,090,936	6,086,241	\$0.15	\$0.11	1,926	1,500	\$797	\$446
Lighting - New Construction	\$91,105	\$31,395	1,456,612	191,689	\$0.06	\$0.16	278	47	\$328	\$663
Motors	\$102,391	\$65,725	524,613	146,354	\$0.20	\$0.45	65	24	\$1,579	\$2,716
Plan Review	\$1,009	\$106,000	0	1,371,917	NA	\$0.08	0	262	NA	\$405
Refrigeration	\$174,178	\$65,000	1,288,536	453,846	\$0.14	\$0.14	246	87	\$708	\$750
DER Approved Commercial Budget Modification Dec. 18, 2013		\$990,378								
TOTAL - COMMERCIAL	\$3,459,446	\$3,252,000	29,083,351	19,810,576	\$0.12	\$0.16	5,289	4,307	\$654	\$755
LOW INCOME										
House Therapy	\$142,054	\$150,000	307,911	367,300	\$0.46	\$0.41	54	70	\$2,635	\$2,134
ON FOR CONSERVATION - INACTIVE										
Town Energy Challenge -INACTIVE	\$13,386	\$0	104,967	0	\$0.13	NA	62	0	\$215	NA
Campus Energy Challenge - INACTIVE	\$0	\$0	0	0	NA	NA	0	0	NA	NA
TOTAL - ON FOR CONSERVATION	\$13,386	\$0	104,967	0	\$0.13	NA	62	0	NA	NA
MISCELLANEOUS										
Company CIP Projects	\$2,366									
Accounting Adjustments	(\$17)									
TOTAL - MISCELLANEOUS	\$2,349									
TOTAL - DIRECT IMPACT	\$4,413,379	\$4,269,900	35,792,002	26,322,711	\$0.12	\$0.16	7,710	6,960	\$572	\$613
TOTAL - INDIRECT IMPACT	\$838,207	\$951,500								

Table 6
2013 CIP PROGRAM STATUS REPORT / CIP TRACKER RECAP - COST PER KW / KWH
Financial Incentive Project -- 2013 Conservation Improvement Programs
Otter Tail Power Company

	2013 EXPENDITURES		2013 ENERGY SAVINGS - KWH		COST PER KWH		2013 COINCIDENT DEMAND SAVINGS - K		COST PER KW	
	ACTUAL	BUDGET	ACTUAL	BUDGET	ACTUAL	BUDGET	ACTUAL	BUDGET	ACTUAL	BUDGET
TOTAL - 2013 CIP PROJECT COSTS	\$5,253,935	\$5,221,400	35,792,002	26,322,711	\$0.15	\$0.20	7,710	6,960	\$681	\$750

Appendix B- Other Evaluations

- **Integral Analytics Rothsay Residential Behavioral Change Impact Analysis**
- **Integral Analytics Rothsay Non-Residential Behavioral Change Impact Analysis**
- **Integral Analytics Bill Analyzer Analysis**
- **OPOWER Behavioral Change Impact Analysis**



123 E. 4th St, Cincinnati Ohio 45202

Final Memorandum

To: Otter Tail Power Company

From: May Wu, Integral Analytics

Date: March 24th, 2014

RE: Impact evaluation results for residential customers subject to the Community Energy Challenge at Rothsay, Minnesota

This memo presents the results from the billing analysis of Otter Tail Power Company's (OTPCo's) Community Energy Challenge (CEC), which targeted all customers in Rothsay, Minnesota. This memo only addresses the impact of CEC on Rothsay's residential customers (i.e., those customers in a revenue class below 10). This analysis relied upon a statistical analysis of actual customer billed electricity consumption before and after participation in the program to estimate the impact of the program. Table 1 presents the results of this billing analysis for savings achieved in 2013. This table shows that the CEC saved 3.66% (or 602 kWh/year) on average in 2013, across all the residential customers in Rothsay, controlling for participation in other OTPCo's energy efficiency programs.

Table 1: Estimated Savings in 2013 – dependent variable is the natural log of daily kWh usage, Jan. 2008 through Dec. 2013 (savings are negative).

	Impact	t-value
As percentage of overall usage	-3.66%	
Average annual kWh	-602 kWh/year	-2.84

For this impact evaluation, data are available both across households (i.e., cross-sectional) and over time (i.e., time-series). With this type of data, known as "panel" data, it becomes possible to control, simultaneously, for differences across households as well as differences across periods in time through the use of a "fixed-effects" panel model specification. The details of this approach will be addressed once the impacts of the CEC are finalized.

Since the CEC was a community-wide program, all households and firms in Rothsay are likely to be influenced to some degree by the program. This implies that once the CEC program started, all of OTPCo's customers in Rothsay become participants. As such, there is no variation in the program participation dates across customers which can be used to account for non-program effects over time. To disentangle the effect of CEC from other factors that may alter energy use, the preferred approach is to use a group of customers that were not exposed to the CEC (i.e., a control group). For the residential analysis, the control group from Pelican Rapids (PR) was used, which is a larger town in the same division as Rothsay and share many similarities. Since these customers are in the same geographic area as Rothsay, it is likely that these customers share the same general characteristics and attitudes as Rothsay residents.

Data

The statistical model used to determine the impact of CEC for residential customers incorporates all the available monthly billing data from Jan. 2008 to Dec. 2013 from the residential customers in Rothsay. This data was combined with the monthly billing data covering the same period for a control group of non-participating OTPC residential customers also in Pelican Rapids (PR). This monthly billing data was merged with the associated weather data (average daily temperate) from Fargo. Table 2 presents the number of households in the Rothsay and Pelican Rapids included in the model.

Table 2: Sample used for estimation.

	Rothsay	Control
Original Sample size	323	1,620
Eliminated due to excessive missing or zero reads or Rothsay customer in control group	7	197
Eliminated due to extremely small monthly usage reads	10	103
Estimation Sample	306	1,320
Total Sample Size	1,626	

Table3 presents that average annual kWh usage for both Rothsay /Pelican Rapids customers and for 2008, 2009, 2010, 2011, 2012 and 2013.

Table3: Average annual electricity usage (kWh), by year and group.

Year	Rothsay	Pelican Rapids
2008	16,441	10,291
2009	16,711	10,255
2010	15,660	10,027
2011	15,816	9,941
2012	15,160	9,560
2013	15,946	10,638

The fixed-effect specification automatically accounts for the level of usage across customers, so the lower consumption of the Pelican Rapids group does not impact the estimated effect of the program.

Estimation

To capture the effect of the program, the regression model included a variable that was equal to 1 for Rothsay customers after the start of CEC (based on the information from OTPCo, the start of CEC in Rothsay was assumed to be May, 2009, after the kickoff celebration). This variable was equal to zero for Rothsay customers prior to CEC and for the entire period for control group. To control for the savings resulting from the Rothsay customer participating in another OTPCo energy efficiency (EE) program, for any customer that participated in an OTPCo EE program, additional variables indicating program participation were created such that they were equal to zero for both Rothsay and Pelican Rapids customers prior to participation of these programs. Such additional variables include OTPCo EE programs¹, Bill Analyzer², and the Opower energy reports.³

Thus, the coefficient on the CEC variable is impact of CEC alone, net of participation in other OTPCo programs. Since the data presented in Table 3 indicates that average usage of the control group is lower than Rothsay customers, the dependent variable in the analysis was the

¹ Other OTPCo programs are created based on program codes: CLRR, CTRL, HT94, RECY, AIRC, IFIN, ADED, ASDP, EZLT, GRNT, MOTR, EC94, CREF, INSU, CAIR, CLRN and newly added programs in 2013 including Business Education, Commercial Cool Savings, Commercial Design Assistance, Compressed Air Audits, Custom Efficiency Grants, Advertising and Education, Recommissioning (RCx). If not shown in the appendix model results it means there is no OTPCo program participants in the sample.

² Participation variable of Bill Analyzer was created based on earliest session date going forward

³ Participation variable of Opower energy report was created based on first report month going forward

natural log of usage. In this approach, the coefficient on the program variable is the savings as expressed as a percentage of usage. The estimated model is presented in Table 4.⁴

Estimation of Saving Achieved in 2013

In order to examine saving persistence and determine how saving behavior may have changed since last evaluation report, the CEC variable was decomposed into CEC_2010 which indicates Rothsay customers usage up to 12/2010, CEC_2011 which indicates usage from 01/2011 to 12/2011, CEC_2012 which indicates usage from 01/2012 to 12/2012 and CEC_2013 which indicates usage from 01/2013 to 12/2013. The estimated model is presented in Table 4.⁵

Table 4: Estimated Savings in 2013 – dependent variable is the natural log of daily kWh usage, Jan. 2008 through Dec. 2013 (savings are negative).

Independent Variable	Coefficient (% of Usage)	t-value	kWh Saving Per Year
01/01/2013 – 12/31/2013	-.0366	-2.84	-602
Sample Size	52.305 obs (1,626 premises)		
R-Squared	64%		

Most saving came from the early stage of the program as seen in previous reports (>5%). In the later stage in 2013 slightly lower than 4% saving (3.66%) was achieved which is significant at 95% confidence level. This is close to the saving achieved in 2012 (reported as 3.6% last year).

In order to get the average annual kWh savings associated with the CEC, the annual percentage saving of 3.66% is multiplied by the average annualized usage based on the monthly data from Jan, 2008 to December 2008 (the pre-participation period) for Rothsay customers (16,441 kWh), which resulted in an estimated annual savings of 602 kWh per customer.

⁴ The models include weather terms and monthly indicator terms in addition to the variables presented in these tables. These variables were not included in order make interpretation clearer. The full models are included in Appendix A.

⁵ The models include weather terms, monthly indicator terms and other program participation in addition to the variables presented in these tables. These variables were not included in order make interpretation clearer. The full models are included in Appendix B.

APPENDIX A: Estimation results – saving in 2013

Number of Observations Read 52305
Number of Observations Used 52305

Dependent Variable: ln_kwhd

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1707	9571.77690	5.60737	52.76	<.0001
Error	50597	5377.23397	0.10628		
Corrected Total	52304	14949.01086			

R-Square 0.640295 Coeff Var 9.073977 Root MSE 0.326000 ln_kwhd Mean 3.592687

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Account__	1625	8183.573435	5.036045	47.39	<.0001
monthly_avg_*monthID	71	1381.897186	19.463341	183.14	<.0001
BApt	1	0.003140	0.003140	0.03	0.8635
APPLpt	1	0.038428	0.038428	0.36	0.5476
INSUpt	1	0.062191	0.062191	0.59	0.4443
HT94pt	1	0.473782	0.473782	4.46	0.0347
CLRRpt	1	0.251181	0.251181	2.36	0.1242
CTRLpt	1	1.606241	1.606241	15.11	0.0001
Opower	1	0.910130	0.910130	8.56	0.0034
CEC_2010	1	1.841323	1.841323	17.33	<.0001
CEC_2011	1	0.034631	0.034631	0.33	0.5681
CEC_2012	1	0.230571	0.230571	2.17	0.1408
CEC_2013	1	0.854658	0.854658	8.04	0.0046

Source	DF	Type III SS	Mean Square	F Value	Pr > F
monthly_avg_*monthID	71	1357.721622	19.122840	179.94	<.0001
BApt	1	0.000000	0.000000	0.00	0.9986
APPLpt	1	0.061717	0.061717	0.58	0.4460
INSUpt	1	0.177504	0.177504	1.67	0.1962
HT94pt	1	0.505678	0.505678	4.76	0.0292
CLRRpt	1	0.238958	0.238958	2.25	0.1338
CTRLpt	1	1.593887	1.593887	15.00	0.0001
Opower	1	0.902087	0.902087	8.49	0.0036
CEC_2010	1	2.906955	2.906955	27.35	<.0001
CEC_2011	1	0.564034	0.564034	5.31	0.0212
CEC_2012	1	0.791812	0.791812	7.45	0.0063
CEC_2013	1	0.854658	0.854658	8.04	0.0046

Parameter	Estimate	Standard Error	t Value	Pr > t
monthly_avg_*monthID 20080101	0.0878074551 B	0.00316764	27.72	<.0001
monthly_avg_*monthID 20080201	0.0552050581 B	0.00242974	22.72	<.0001
monthly_avg_*monthID 20080301	0.0179135953 B	0.00095678	18.72	<.0001
monthly_avg_*monthID 20080401	0.0060948892 B	0.00056086	10.87	<.0001
monthly_avg_*monthID 20080501	0.0020345451 B	0.00041340	4.92	<.0001
monthly_avg_*monthID 20080601	0.0006068968 B	0.00035432	1.71	0.0867
monthly_avg_*monthID 20080701	0.0021145232 B	0.00031244	6.77	<.0001
monthly_avg_*monthID 20080801	0.0026561125 B	0.00031526	8.43	<.0001

monthly_avg_*monthID	20080901	0.0012826681	B	0.00037043	3.46	0.0005
monthly_avg_*monthID	20081001	0.0040082467	B	0.00046962	8.54	<.0001
monthly_avg_*monthID	20081101	0.0115517905	B	0.00067924	17.01	<.0001
monthly_avg_*monthID	20081201	0.0794176015	B	0.00302421	26.26	<.0001
monthly_avg_*monthID	20090101	0.3168862417	B	0.01116678	28.38	<.0001
monthly_avg_*monthID	20090201	0.0369585653	B	0.00166616	22.18	<.0001
monthly_avg_*monthID	20090301	0.0173016920	B	0.00084951	20.37	<.0001
monthly_avg_*monthID	20090401	0.0054653299	B	0.00051583	10.60	<.0001
monthly_avg_*monthID	20090501	0.0020379607	B	0.00039075	5.22	<.0001
monthly_avg_*monthID	20090601	0.0009207920	B	0.00034444	2.67	0.0075
monthly_avg_*monthID	20090701	0.0015791828	B	0.00032743	4.82	<.0001
monthly_avg_*monthID	20090801	0.0020967408	B	0.00032563	6.44	<.0001
monthly_avg_*monthID	20090901	0.0015092822	B	0.00033196	4.55	<.0001
monthly_avg_*monthID	20091001	0.0061666670	B	0.00051847	11.89	<.0001
monthly_avg_*monthID	20091101	0.0084370647	B	0.00054371	15.52	<.0001
monthly_avg_*monthID	20091201	0.0450911307	B	0.00186053	24.24	<.0001
monthly_avg_*monthID	20100101	0.0637577985	B	0.00240278	26.53	<.0001
monthly_avg_*monthID	20100201	0.0354107555	B	0.00180414	19.63	<.0001
monthly_avg_*monthID	20100301	0.0095775764	B	0.00060629	15.80	<.0001
monthly_avg_*monthID	20100401	0.0026683498	B	0.00042394	6.29	<.0001
monthly_avg_*monthID	20100501	0.0014398952	B	0.00038701	3.72	0.0002
monthly_avg_*monthID	20100601	0.0015196312	B	0.00033861	4.49	<.0001
monthly_avg_*monthID	20100701	0.0029275235	B	0.00030676	9.54	<.0001
monthly_avg_*monthID	20100801	0.0033488912	B	0.00030194	11.09	<.0001
monthly_avg_*monthID	20100901	0.0013298965	B	0.00038215	3.48	0.0005
monthly_avg_*monthID	20101001	0.0026208237	B	0.00043379	6.04	<.0001
monthly_avg_*monthID	20101101	0.0103677059	B	0.00069253	14.97	<.0001
monthly_avg_*monthID	20101201	0.0450631836	B	0.00186219	24.20	<.0001
monthly_avg_*monthID	20110101	0.1114349280	B	0.00415390	26.83	<.0001
monthly_avg_*monthID	20110201	0.0367495913	B	0.00177350	20.72	<.0001
monthly_avg_*monthID	20110301	0.0172783901	B	0.00092274	18.73	<.0001
monthly_avg_*monthID	20110401	0.0053005748	B	0.00050350	10.53	<.0001
monthly_avg_*monthID	20110501	0.0017435918	B	0.00038959	4.48	<.0001
monthly_avg_*monthID	20110601	0.0012908594	B	0.00033769	3.82	0.0001
monthly_avg_*monthID	20110701	0.0038116726	B	0.00029642	12.86	<.0001
monthly_avg_*monthID	20110801	0.0037771063	B	0.00031296	12.07	<.0001
monthly_avg_*monthID	20110901	0.0014636127	B	0.00036135	4.05	<.0001
monthly_avg_*monthID	20111001	0.0023893491	B	0.00041101	5.81	<.0001
monthly_avg_*monthID	20111101	0.0090478104	B	0.00062842	14.40	<.0001
monthly_avg_*monthID	20111201	0.0165760743	B	0.00082904	19.99	<.0001
monthly_avg_*monthID	20120101	0.0246861093	B	0.00107793	22.90	<.0001
monthly_avg_*monthID	20120201	0.0178422400	B	0.00100524	17.75	<.0001
monthly_avg_*monthID	20120301	0.0060527697	B	0.00051430	11.77	<.0001
monthly_avg_*monthID	20120401	0.0020123657	B	0.00046223	4.35	<.0001
monthly_avg_*monthID	20120501	0.0008462406	B	0.00036739	2.30	0.0213
monthly_avg_*monthID	20120601	0.0017896355	B	0.00031813	5.63	<.0001
monthly_avg_*monthID	20120701	0.0039951747	B	0.00027999	14.27	<.0001
monthly_avg_*monthID	20120801	0.0030358524	B	0.00031318	9.69	<.0001
monthly_avg_*monthID	20120901	0.0010488316	B	0.00035793	2.93	0.0034
monthly_avg_*monthID	20121001	0.0039752201	B	0.00049010	8.11	<.0001
monthly_avg_*monthID	20121101	0.0097192172	B	0.00070254	13.83	<.0001
monthly_avg_*monthID	20121201	0.0295346631	B	0.00136892	21.58	<.0001
monthly_avg_*monthID	20130101	0.0565123854	B	0.00212148	26.64	<.0001
monthly_avg_*monthID	20130201	0.0400911255	B	0.00191699	20.91	<.0001
monthly_avg_*monthID	20130301	0.0247539337	B	0.00113919	21.73	<.0001
monthly_avg_*monthID	20130401	0.0090300114	B	0.00064541	13.99	<.0001
monthly_avg_*monthID	20130501	0.0020693831	B	0.00038684	5.35	<.0001
monthly_avg_*monthID	20130601	0.0015978364	B	0.00033094	4.83	<.0001
monthly_avg_*monthID	20130701	0.0030099739	B	0.00030025	10.02	<.0001
monthly_avg_*monthID	20130801	0.0030177803	B	0.00030251	9.98	<.0001
monthly_avg_*monthID	20130901	0.0019796490	B	0.00033811	5.86	<.0001
monthly_avg_*monthID	20131001	0.0046845823	B	0.00048073	9.74	<.0001
monthly_avg_*monthID	20131101	0.0135748416	B	0.00079222	17.14	<.0001
BApt		0.0000177074		0.01005451	0.00	0.9986
APPLpt		-.0137997313		0.01810855	-0.76	0.4460
INSUpt		-.0714454432		0.05528250	-1.29	0.1962
HT94pt		0.0466846381		0.02140199	2.18	0.0292
CLRRpt		0.0957247984		0.06383826	1.50	0.1338
CTRLpt		0.0666864447		0.01721971	3.87	0.0001
Opower		-.0144224670		0.00495031	-2.91	0.0036
CEC_2010		-.0525472263		0.01004726	-5.23	<.0001
CEC_2011		-.0279123005		0.01211602	-2.30	0.0212
CEC_2012		-.0336064811		0.01231201	-2.73	0.0063

CEC_2013

-.0366126474

0.01291077

-2.84

0.0046



123 E. 4th St, Cincinnati Ohio 45202

Final Memorandum

To: Otter Tail Power Company

From: May Wu, Michael Ozog, Integral Analytics

Date: March 24th, 2014

RE: Final Impact Evaluation Results for Non-residential Customers Subject to the Community Energy Challenge at Rothsay, Minnesota

This memo presents the results from the billing analysis of Otter Tail Power Company's (OTPCo's) Community Energy Challenge (CEC), which targeted all customers in Rothsay, Minnesota. As discussed in my prior memo, this memo only addresses the impact of CEC on Rothsay's non-residential customers (i.e., those customers in a revenue class above 10).

This analysis relied upon a statistical analysis of actual customer billed electricity consumption before and after participation in the program to estimate the impact of the program. Table 1 presents the results of this billing analysis on saving achieved in 2013. This table shows that the CEC saved 7.2% (or 1,812 kWh per year) on average, across all the non residential customers in Rothsay.

Table 1: Estimated Savings in 2013 – dependent variable is the natural log of daily kWh usage, Jan. 2008 through Dec. 2013 (savings are negative).

	Impact	t-value
As percentage of overall usage	-7.21%	-2.24
Average annual kWh	-1,812 kWh/year	

As was the case for the residential analysis, data are available both across customers (i.e., cross-sectional) and over time (i.e., time-series). Customers of Pelican Rapids are included in the analysis as the control group. Pelican Rapids is a larger town in the same division as Rothsay, sharing the same weather zone as Rothsay. A panel model (which pools the data across customers and over time into a single model) was developed with which it becomes possible to control, simultaneously, for differences across households as well as differences across periods in time through the use of a "fixed-effects" panel model specification.

Data

The statistical model used to determine the impact of CEC for non-residential customers incorporates all the available monthly billing data from Jan. 1, 2008 to Dec. 2013 from the non-residential customers in Rothsay as the treatment group and customers in Pelican Rapids as the control group. This monthly billing data was merged with the associated weather data (average monthly temperature) from Fargo. Thirteen facilities including the Rothsay School were eliminated from the analysis since they also participated in separate energy efficiency (EE) programs through OTPCo. In addition, twenty three non-residential accounts in Pelican Rapids are eliminated per the same reason. By eliminating these customers, the estimated impacts found in this analysis are due to only the behavioral changes resulting from the CEC, and not measure installations associated with EE programs. Table 2 presents the number of non-residential customers used in the analysis.

Table 2: Sample used for estimation.

	Rothsay customer	Pelican Rapids
Original Sample size	65	290
Participated in EE program	3	16
Eliminated due to excessive missing or zero reads	2	12
Estimation Sample	60	262

Table3: Average annual electricity usage (kWh), by year and group

Year	Rothsay	Pelican Rapids
2008	25,140	39,179
2009	26,428	38,818
2010	25,700	36,772
2011	25,255	34,857
2012	38,124	49,188
2013	43,885	39,798

Estimation

To capture the effect of the program, the regression model included a variable that was equal to 1 for Rothsay customers after the start of CEC (based on the information from OTPCo, the start of CEC in Rothsay was assumed to be May, 2009, after the kickoff celebration). This variable was equal to zero for Rothsay customers prior to CEC and for the entire period for control group. To control for the savings

resulting from the Rothsay customer participating in another include OTPCo EE programs¹, these customers from both towns are removed from the analysis. Additional variable indicating participation in Bill Analyzer was created such that they were equal to zero for both Rothsay and Pelican Rapids customers prior to participation of these programs.

The model also included indicators of each month of each year, as well as average temperature and dew point to explicitly control for weather impact.

Estimation of Saving Achieved in 2013

In order to examine saving persistence and determine how much saving was achieved since last evaluation report, the CEC variable was decomposed into CEC_2010 which indicates Rothsay customers' usage up to 12/2010, CEC_2011 which indicates usage since 01/2011, and CEC_2012 which indicates usage since 01/2012 and CEC_2013 which indicates usage since 01/2013. The estimated 2013 saving estimate is presented in Table 5.²

Table 5: Estimated Savings in 2013 – dependent variable is the natural log of daily kWh usage, Jan. 2008 through Dec. 2013 (savings are negative).

Independent Variable	Coefficient (% of Usage)	t-value	kWh Saving Per Year
1/1/2013 – 12/31/2013	-.0721	-2.24	-1.812
Sample Size	13,923 obs (322 premises)		
R-Squared	88%		

Most saving came from the early stage of the program as seen in previous evaluation reports. In 2013, the program achieved saving of approximately 7.2% (1,812 kWh / year) at 95% confidence interval.

¹ Other OTPCo programs are created based on program codes: CLRR, CTRL, HT94, RECY, AIRC, IFIN, ADED, ASDP, EZLT, GRNT, MOTR, EC94, CREF, INSU, CAIR, CLRN, Advertising and Education, Business Education, Commercial Cool Savings, Commercial Design Assistance, Compressed Air Audits, Custom Efficiency Grants, Recommissioning (RCx)

² The models include weather terms and monthly indicator terms in addition to the variables presented in these tables. These variables were not included in order make interpretation clearer. The full models are included in Appendix A.

APPENDIX A: Estimation results – by year

Number of Observations Read 13923
Number of Observations Used 13923

Dependent Variable: ln_kwhd

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	396	18654.87244	47.10826	252.19	<.0001
Error	13526	2526.61840	0.18680		
Corrected Total	13922	21181.49085			

R-Square 0.880716
Coeff Var 10.86594
Root MSE 0.432200
ln_kwhd Mean 3.977571

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Account__	321	18165.93315	56.59169	302.96	<.0001
monthID	71	482.71621	6.79882	36.40	<.0001
CEC_2010	1	3.47036	3.47036	18.58	<.0001
CEC_2011	1	0.97184	0.97184	5.20	0.0226
CEC_2012	1	0.84191	0.84191	4.51	0.0338
CEC_2013	1	0.93898	0.93898	5.03	0.0250

Source	DF	Type III SS	Mean Square	F Value	Pr > F
monthID	71	470.7982954	6.6309619	35.50	<.0001
CEC_2010	1	5.9731025	5.9731025	31.98	<.0001
CEC_2011	1	2.3354805	2.3354805	12.50	0.0004
CEC_2012	1	1.5847422	1.5847422	8.48	0.0036
CEC_2013	1	0.9389771	0.9389771	5.03	0.0250

Parameter	Estimate	Standard Error	t Value	Pr > t
monthID 20080101	0.8079573518 B	0.04758147	16.98	<.0001
monthID 20080201	0.7121542079 B	0.04815958	14.79	<.0001
monthID 20080301	0.6269485186 B	0.04824114	13.00	<.0001
monthID 20080401	0.3807139872 B	0.04784624	7.96	<.0001
monthID 20080501	0.2727446408 B	0.04727604	5.77	<.0001
monthID 20080601	0.1884819657 B	0.04865220	3.87	0.0001
monthID 20080701	0.2755215480 B	0.04876374	5.65	<.0001
monthID 20080801	0.2814018375 B	0.04881590	5.76	<.0001
monthID 20080901	0.1882443846 B	0.04869357	3.87	0.0001
monthID 20081001	0.3141206271 B	0.04719879	6.66	<.0001
monthID 20081101	0.4819786511 B	0.04758238	10.13	<.0001
monthID 20081201	0.6274125664 B	0.04566213	13.74	<.0001
monthID 20090101	0.8067506627 B	0.04709931	17.13	<.0001
monthID 20090201	0.6753511149 B	0.04711803	14.33	<.0001
monthID 20090301	0.6524428735 B	0.04711737	13.85	<.0001
monthID 20090401	0.3762564660 B	0.04593594	8.19	<.0001
monthID 20090501	0.2665174465 B	0.04747726	5.61	<.0001
monthID 20090601	0.1988069409 B	0.04733899	4.20	<.0001
monthID 20090701	0.2961473442 B	0.04749274	6.24	<.0001
monthID 20090801	0.3020803118 B	0.04658624	6.48	<.0001
monthID 20090901	0.3000330292 B	0.04762226	6.30	<.0001
monthID 20091001	0.3997953749 B	0.04717681	8.47	<.0001
monthID 20091101	0.4955290932 B	0.04686800	10.57	<.0001
monthID 20091201	0.6984393779 B	0.04675333	14.94	<.0001
monthID 20100101	0.7695489854 B	0.04685467	16.42	<.0001
monthID 20100201	0.6116655513 B	0.04702195	13.01	<.0001
monthID 20100301	0.5499593613 B	0.04609192	11.93	<.0001
monthID 20100401	0.3309260802 B	0.04753292	6.96	<.0001
monthID 20100501	0.2692807664 B	0.04745881	5.67	<.0001
monthID 20100601	0.2455602997 B	0.04773904	5.14	<.0001
monthID 20100701	0.3454176996 B	0.04800706	7.20	<.0001
monthID 20100801	0.3331112097 B	0.04672626	7.13	<.0001
monthID 20100901	0.2027712812 B	0.04785695	4.24	<.0001
monthID 20101001	0.2773609398 B	0.04738299	5.85	<.0001
monthID 20101101	0.5211397397 B	0.04679797	11.14	<.0001
monthID 20101201	0.7421158702 B	0.04699436	15.79	<.0001
monthID 20110101	0.7670709039 B	0.04709468	16.29	<.0001
monthID 20110201	0.6123853793 B	0.04717081	12.98	<.0001
monthID 20110301	0.5914831790 B	0.04695753	12.60	<.0001
monthID 20110401	0.3549918825 B	0.04637751	7.65	<.0001
monthID 20110501	0.2561184705 B	0.04758934	5.38	<.0001
monthID 20110601	0.1925547508 B	0.04739777	4.06	<.0001
monthID 20110701	0.2967977718 B	0.04758261	6.24	<.0001
monthID 20110801	0.2749413215 B	0.04696695	5.85	<.0001
monthID 20110901	0.1747280765 B	0.04770746	3.66	0.0003
monthID 20111001	0.2420218979 B	0.04753201	5.09	<.0001
monthID 20111101	0.4326295370 B	0.04682843	9.24	<.0001
monthID 20111201	0.4635397321 B	0.04693192	9.88	<.0001
monthID 20120101	0.5956138522 B	0.04744549	12.55	<.0001
monthID 20120201	0.5065036087 B	0.04799016	10.55	<.0001
monthID 20120301	0.4161108857 B	0.04667501	8.92	<.0001
monthID 20120401	0.2185810843 B	0.04829749	4.53	<.0001
monthID 20120501	0.1855278062 B	0.04766887	3.89	<.0001
monthID 20120601	0.1892348305 B	0.04835702	3.91	<.0001
monthID 20120701	0.3063518000 B	0.04835505	6.34	<.0001
monthID 20120801	0.2415192988 B	0.04833736	5.00	<.0001
monthID 20120901	0.1723795973 B	0.04838748	3.56	0.0004
monthID 20121001	0.3054849399 B	0.04706329	6.49	<.0001
monthID 20121101	0.4484575045 B	0.04789077	9.36	<.0001
monthID 20121201	0.5022739098 B	0.04690026	10.71	<.0001
monthID 20130101	0.7022797404 B	0.04665791	15.05	<.0001
monthID 20130201	0.5805324007 B	0.04651740	12.48	<.0001
monthID 20130301	0.5901138007 B	0.04651620	12.69	<.0001
monthID 20130401	0.4873466965 B	0.04680079	10.41	<.0001
monthID 20130501	0.2744396176 B	0.04698618	5.84	<.0001
monthID 20130601	0.2032084824 B	0.04763917	4.27	<.0001

monthID	20130701	0.2801807902 B	0.04796586	5.84	<.0001
monthID	20130801	0.2515786099 B	0.04788094	5.25	<.0001
monthID	20130901	0.1755448786 B	0.04776116	3.68	0.0002
monthID	20131001	0.3495581739 B	0.04758810	7.35	<.0001
monthID	20131101	0.5207932251 B	0.04700359	11.08	<.0001
CEC_2010		-.1542018386	0.02726934	-5.65	<.0001
CEC_2011		-.1104428057	0.03123449	-3.54	0.0004
CEC_2012		-.0958395944	0.03290416	-2.91	0.0036
CEC_2013		-.0721478014	0.03217961	-2.24	0.0250



123 E. 4th St, Cincinnati Ohio 45202

Final Memorandum

To: Otter Tail Power Company

From: May Wu, Integral Analytics

Date: March 24th, 2014

RE: Final Impact Evaluation Results for the Bill Analyzer Program (Program Year 2013)

This memo presents the final results from the billing analysis of Otter Tail Power Company's (OTPCo's) Bill Analyzer energy efficiency program. This analysis relied upon a statistical analysis of actual customer billed electricity consumption before and after participation in the program to estimate the impact of the program. Table 1 presents the results of this billing analysis.

Table 1: Average Annual kWh Savings:

Participation Level	Savings (kWh/year)
Overall	715
Used Home Energy Center	332
Used the Bill History or Bill Analysis	540
Used CSR	1449
Level 1	621
Level 2	1015
Level 3	0

For this impact evaluation, data are available both across households (i.e., cross-sectional) and over time (i.e., time-series). With this type of data, known as "panel" data, it becomes possible to control, simultaneously, for differences across households as well as differences across periods in time through the use of a "fixed-effects" panel model specification. The fixed-effect refers to the model specification aspect that differences across homes that do not vary over the estimation period (such as square footage, heating system, etc.) can be explained, in large part, by customer-specific intercept terms that

capture the net change in consumption due to the program, controlling for other factors that do change with time (e.g., the weather).

Because the consumption data in the panel model includes months before and after the installation of measures through the program, the period of program participation (or the participation window) may be defined specifically for each customer. This feature of the panel model allows for the pre-installation months of consumption to effectively act as controls for post-participation months. In addition, this model specification, unlike annual pre/post-participation models such as annual change models, does not require a full year of post-participation data. Per OTP's request in this analysis a control group was used to explicitly control for any bias that might not have been captured in a fixed effect model with only participants.

We know the exact month of participation in the program for each participant, and are able to construct customer specific models that measure the change in usage consumption immediately before and after the date of program participation, controlling for weather and customer characteristics.

The fixed effects model can be viewed as a type of differencing model in which all characteristics of the home, which (1) are independent of time and (2) determine the level of energy consumption, are captured within the customer-specific constant terms. In other words, differences in customer characteristics that cause variation in the level of energy consumption, such as building size and structure, are captured by constant terms representing each unique household.

Algebraically, the fixed-effect panel data model is described as follows:

$$y_{it} = \alpha_i + \beta x_{it} + \varepsilon_{it},$$

where:

y_{it} = energy consumption for home i during month t

α_i = constant term for site i

β = vector of coefficients

x = vector of variables that represent factors causing changes in energy consumption for home i during month t (i.e., weather and participation)

ε = error term for home i during month t .

With this specification, the only information necessary for estimation is those factors that vary month to month for each customer, and that will affect energy use, which effectively are weather conditions and

program participation. Other non-measurable factors can be captured through the use of monthly indicator variables (e.g., to capture the effect of potentially seasonal energy loads).

The effect of the program was estimated by including a variable which is equal to one for all months after the customer first logged into the Bill Analyzer website. For those control group members this variable is set to zero in all months. Thus the coefficient on this variable is the savings associated with any general interaction with the website. In order to determine if there is any savings associated with going deeper in the tools available on the website, additional models were estimated that determined the savings from using various features on the site, as well as the highest level achieved by the customer.¹ Finally, in order to account for differences in billing days, billing data was standardized according to calendar months.

Data

The statistical model used to determine the impact of Bill Analyzer incorporates monthly billing data from Jan. 1, 2008 to Dec. 2013 from participants in Minnesota, a control group of non-participating OTPC residential customers also in Minnesota, weather data (average monthly temperature) for the same period, other OTP program participation and information about each participants use of Bill Analyzer (login date and tool used). Table 2 presents the number of households in the participant and non-participant group included in the model.

Table 2: Sample used for estimation.

	Participants	Non-participants
Original Sample size	2,723	3,677
Eliminated due to excessive missing or zero reads or extremely small reads in all months	77	241
Eliminated Dashboard (IBP) only customers ²	92	0
Estimation Sample	2,554	3,436
Total Sample Size	5,990 homes	

The numbers of participants that used the Home Energy Center (HEC), CSR, or bill history or bill analysis (CCSS) tools or have completed Level 1, Level2, or Level 3 are presented in Table 3. Since a customer

¹ The features used by the customer and the levels (1, 2, and 3) achieved were defined in the dataset obtained from Otter Tail Power.

² Dashboard viewers (those accounts that participated ONLY in IBP) are removed given they are not considered interactive.

can log in multiple times and use different combinations of the Bill Analyzer each time, the total across the different tools/levels will be greater than the number of individual users.

Table 3: Bill Analyzer featured used.

	HEC	CSR	CCSS	Completed		
				Level 1	Level 2	Level 3
Number	775	111	1372	1305	455	68
% of total	30%	4%	54%	51%	18%	3%

Finally, table 4 presents that average annual kWh usage for both the participants and non-participants for 2008, 2009, 2010, 2011, 2012 and 2013.

Table 4: Average annual electricity usage (kWh), by year and group.

Year	Participants	Non-participants
2008	16,908	13,267
2009	17,309	13,628
2010	16,330	12,929
2011	17,589	14,158
2012	15,696	12,834
2013	17,459	14,461

Estimation

The estimated models are presented in Table 5-7.³

³ The models include weather terms, monthly indicator terms and other OTP program participation in addition to the variables presented in these tables. These variables were not included in order make interpretation clearer. The full models are included in the Appendix.

Table 5: Estimated Overall Savings – dependent variable is daily kWh usage, using usage from Jan. 2008 through Dec. 2013 (savings are negative) of those who actively participated in 2013.

Independent Variable	Coefficient (kWh/d)	t-value
Logged into the Bill Analyzer website	-1.96	-7.76
Sample Size	168,777 obs (5,990 homes of which 2,554 homes are BA participants, with 3,436 are control group members)	
R-Squared	64%	

Table 6: Estimated Savings by Tool Used – dependent variable is daily kWh usage, using usage from Jan. 2008 through Dec. 2013 (savings are negative) of those who actively participated in 2013.

Independent Variable	Coefficient (kWh/d)	t-value
Used Home Energy Center	-0.91	-2.50
Used the Bill History or Bill Analysis	-1.48	-5.02
Used CSR	-3.97	-5.17
Sample Size	168,777 obs (5,990 homes of which 2,554 homes are BA participants, with 3,436 are control group members)	
R-Squared	65%	

Table 7: Estimated Savings by Achieved Level – dependent variable is daily kWh usage, using usage from Jan. 2008 through Dec. 2013 (savings are negative) of those who actively participated in 2013. (savings are negative).

Independent Variable	Coefficient (kWh/d)	t-value
Reached Level 1	-1.70	-4.71
Reached Level 2	-2.78	-6.33
Reached Level 3 ⁴	0.02	0.03
Sample Size	168,777 obs (5,990 homes of which 2,554 homes are BA participants, with 3,436 are control group members)	
R-Squared	65%	

These estimated models show that the Bill Analyzer program does induce energy conservation by participants, with a statistically significant average annual savings of 715 kWh (1.96×365). Customers who used CSR achieved the highest savings level of 1,449 kWh. Customer who used the bill history or bill analysis tools achieved some savings of 540 kWh per year (1.48×365). Customer who used the home analyzer achieved some savings of 332 kWh per year (0.91×365).

As one would expect, the higher the level the customer achieves, the higher the resulting savings. Customers who reached level 1 show statistical significant savings of 620 kWh per year (1.70×365). Customers reached level 2 achieved additional saving of 394 kWh per year and in total saved 1,014 kWh per year (the saving estimate is the total saving of level 2). Getting to level 3 results in no additional savings; actually level 3 customers achieved no saving in 2013. However, it is noteworthy that besides the existing level 3 customers; only 3 additional accounts achieved level 3 in 2013. Moreover the saving estimates associated with various levels are consistent with results from last year because they fall within the confidence interval of program year 2012.

Conclusion

In summary, these results show that the Bill Analyzer program does induce energy conservation by participants, with a statistically significant average annual savings of 715 kWh. Customers who used CSR

⁴ The coefficient estimates are total saving of each level. Therefore the total saving of level 1 customers are 620 kWh per year (1.70×365). The total saving of level 2 customers are 1,014 kWh per year (2.78×365). Level 3 customers achieved no saving (using the same formula would lead to $0.02 \times 365 = 7.2$ which is not significantly different from 0).

achieved the highest savings level of 1,449 kWh. Customer who used the bill history or bill analysis tools achieved some savings (540 kWh). Customers who used Home Analyzer saved 332 kWh.

As one would expect, the higher the level the customer achieves, the higher the resulting savings. Customers who reached level 1 show statistical significant savings of 620 kWh per year (1.70×365). Customers reached level 2 achieved additional saving of 394 kWh per year and in total saved 1,014 kWh per year (the saving estimate is total saving of level 2). Getting to level 3 does not lift savings from level 2 although it is noteworthy that only 3 accounts that reached level 3 in 2013 therefore the result on level3 may not reflect the true saving that a level 3 customer could have yielded.

Based on the estimated results and their statistical significance, the most appropriate savings estimate for the Bill Analyzer program is the overall estimate of 715 kWh / year per participant based on the sample of 2,554 participating accounts.

APPENDIX:

Estimated Overall Model

Number of Observations Read 168777
Number of Observations Used 168777

Dependent Variable: kwhd

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6069	147842800.8	24360.3	48.98	<.0001
Error	162707	80929079.9	497.4		
Corrected Total	168776	228771880.6			

R-Square 0.646246
Coeff Var 49.18951
Root MSE 22.30228
kwhd Mean 45.33949

Source	DF	Type I SS	Mean Square	F Value	Pr > F
ConcatID	5989	120689498.7	20151.9	40.52	<.0001
monthly_avg_*monthID	71	27105012.8	381760.7	767.53	<.0001
APPLpt	1	3808.9	3808.9	7.66	0.0057
INSUpt	1	6.5	6.5	0.01	0.9092
HT94pt	1	3856.5	3856.5	7.75	0.0054
CLRNpt	1	709.5	709.5	1.43	0.2323
CLRRpt	1	331.1	331.1	0.67	0.4146
CTRLpt	1	129.6	129.6	0.26	0.6097
CECpt	1	2858.4	2858.4	5.75	0.0165
Opower	1	6636.7	6636.7	13.34	0.0003
overall_BA	1	29952.1	29952.1	60.22	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
monthly_avg_*monthID	71	26977431.12	379963.82	763.91	<.0001
APPLpt	1	4406.16	4406.16	8.86	0.0029
INSUpt	1	9.87	9.87	0.02	0.8880
HT94pt	1	2974.14	2974.14	5.98	0.0145
CLRNpt	1	686.44	686.44	1.38	0.2401
CLRRpt	1	387.26	387.26	0.78	0.3776
CTRLpt	1	241.05	241.05	0.48	0.4863
CECpt	1	3114.03	3114.03	6.26	0.0123
Opower	1	6117.80	6117.80	12.30	0.0005
overall_BA	1	29952.05	29952.05	60.22	<.0001

Parameter	Estimate	Standard Error	t Value	Pr > t
monthly_avg_*monthID 20080201	-0.74613490	0.06561836	-11.37	<.0001
monthly_avg_*monthID 20080301	-0.63054309	0.02702542	-23.33	<.0001
monthly_avg_*monthID 20080401	-0.74058038	0.01608902	-46.03	<.0001
monthly_avg_*monthID 20080501	-0.71462003	0.01204758	-59.32	<.0001
monthly_avg_*monthID 20080601	-0.65258156	0.01011792	-64.50	<.0001
monthly_avg_*monthID 20080701	-0.52503707	0.00905026	-58.01	<.0001
monthly_avg_*monthID 20080801	-0.53743519	0.00914093	-58.79	<.0001
monthly_avg_*monthID 20080901	-0.70044162	0.01059704	-66.10	<.0001
monthly_avg_*monthID 20081001	-0.74009912	0.01343298	-55.10	<.0001
monthly_avg_*monthID 20081101	-0.60686199	0.01977970	-30.68	<.0001
monthly_avg_*monthID 20081201	0.02290988	0.08395784	0.27	0.7850
monthly_avg_*monthID 20090101	-0.40570564	0.12724184	-3.19	0.0014
monthly_avg_*monthID 20090201	-0.69372329	0.04529647	-15.32	<.0001
monthly_avg_*monthID 20090301	-0.54566572	0.02415579	-22.59	<.0001
monthly_avg_*monthID 20090401	-0.70000567	0.01475212	-47.45	<.0001
monthly_avg_*monthID 20090501	-0.70096908	0.01138613	-61.56	<.0001
monthly_avg_*monthID 20090601	-0.64214130	0.00979987	-65.53	<.0001
monthly_avg_*monthID 20090701	-0.59116947	0.00934816	-63.24	<.0001
monthly_avg_*monthID 20090801	-0.58958092	0.00933946	-63.13	<.0001
monthly_avg_*monthID 20090901	-0.61091865	0.00956154	-63.89	<.0001
monthly_avg_*monthID 20091001	-0.72842645	0.01508068	-48.30	<.0001
monthly_avg_*monthID 20091101	-0.58111641	0.01577133	-36.85	<.0001
monthly_avg_*monthID 20091201	-0.17264833	0.05446983	-3.17	0.0015
monthly_avg_*monthID 20100101	-0.06744552	0.06812413	-0.99	0.3222
monthly_avg_*monthID 20100201	-0.98930170	0.05293624	-18.69	<.0001
monthly_avg_*monthID 20100301	-0.59842916	0.01725593	-34.68	<.0001
monthly_avg_*monthID 20100401	-0.70074808	0.01213924	-57.73	<.0001
monthly_avg_*monthID 20100501	-0.68212173	0.01085709	-62.83	<.0001
monthly_avg_*monthID 20100601	-0.60327269	0.00946612	-63.73	<.0001
monthly_avg_*monthID 20100701	-0.46354669	0.00854167	-54.27	<.0001
monthly_avg_*monthID 20100801	-0.47059872	0.00852004	-55.23	<.0001
monthly_avg_*monthID 20100901	-0.71797341	0.01082062	-66.35	<.0001
monthly_avg_*monthID 20101001	-0.71165944	0.01213111	-58.66	<.0001
monthly_avg_*monthID 20101101	-0.63506508	0.01974192	-32.17	<.0001
monthly_avg_*monthID 20101201	-0.13188786	0.05392680	-2.45	0.0145
monthly_avg_*monthID 20110101	-0.05110224	0.11981689	-0.43	0.6697
monthly_avg_*monthID 20110201	-0.78724489	0.04847587	-16.24	<.0001
monthly_avg_*monthID 20110301	-0.60022788	0.02621757	-22.89	<.0001
monthly_avg_*monthID 20110401	-0.66258899	0.01411915	-46.93	<.0001
monthly_avg_*monthID 20110501	-0.67453867	0.01095465	-61.58	<.0001
monthly_avg_*monthID 20110601	-0.59460717	0.00920410	-64.60	<.0001
monthly_avg_*monthID 20110701	-0.41695425	0.00822047	-50.72	<.0001
monthly_avg_*monthID 20110801	-0.48770925	0.00858521	-56.81	<.0001
monthly_avg_*monthID 20110901	-0.67880387	0.01031110	-65.83	<.0001
monthly_avg_*monthID 20111001	-0.70066259	0.01158384	-60.49	<.0001
monthly_avg_*monthID 20111101	-0.67659360	0.01808140	-37.42	<.0001
monthly_avg_*monthID 20111201	-0.48564500	0.02450130	-19.82	<.0001
monthly_avg_*monthID 20120101	-0.48829103	0.03108134	-15.71	<.0001
monthly_avg_*monthID 20120201	-0.73691113	0.02778687	-26.52	<.0001
monthly_avg_*monthID 20120301	-0.63566894	0.01434773	-44.30	<.0001
monthly_avg_*monthID 20120401	-0.78063626	0.01274246	-61.26	<.0001
monthly_avg_*monthID 20120501	-0.67686759	0.01013848	-66.76	<.0001
monthly_avg_*monthID 20120601	-0.54565075	0.00872845	-62.51	<.0001
monthly_avg_*monthID 20120701	-0.38752071	0.00780618	-49.64	<.0001
monthly_avg_*monthID 20120801	-0.52530037	0.00874999	-60.03	<.0001
monthly_avg_*monthID 20120901	-0.67726587	0.01019350	-66.44	<.0001
monthly_avg_*monthID 20121001	-0.74467093	0.01380289	-53.95	<.0001
monthly_avg_*monthID 20121101	-0.76002415	0.01976765	-38.45	<.0001
monthly_avg_*monthID 20121201	-1.87564893	0.03835209	-48.91	<.0001
monthly_avg_*monthID 20130101	0.21557245	0.06205708	3.47	0.0005
monthly_avg_*monthID 20130201	-0.58273177	0.05344244	-10.90	<.0001
monthly_avg_*monthID 20130301	-0.48384188	0.03522303	-13.74	<.0001
monthly_avg_*monthID 20130401	-0.65167874	0.01948478	-33.45	<.0001
monthly_avg_*monthID 20130501	-0.59266765	0.01212535	-48.88	<.0001
monthly_avg_*monthID 20130601	-0.53174205	0.00995578	-53.41	<.0001
monthly_avg_*monthID 20130701	-0.43236972	0.00930570	-46.46	<.0001

monthly_avg_*monthID 20130801	-0.45627012	0.00936548	-48.72	<.0001
monthly_avg_*monthID 20130901	-0.54903959	0.01049444	-52.32	<.0001
monthly_avg_*monthID 20131001	-0.64771855	0.01493034	-43.38	<.0001
monthly_avg_*monthID 20131101	-0.54572321	0.02495682	-21.87	<.0001
monthly_avg_*monthID 20131201	-4.35503594	0.13849272	-31.45	<.0001
APPLpt	-6.02536798	2.02442841	-2.98	0.0029
INSUpt	0.47697550	3.38572684	0.14	0.8880
HT94pt	-2.22269015	0.90896504	-2.45	0.0145
CLRNpt	20.14258738	17.14597045	1.17	0.2401
CLRRpt	5.40650026	6.12722032	0.88	0.3776
CTRLpt	0.47751914	0.68594268	0.70	0.4863
CECpt	4.73297035	1.89156682	2.50	0.0123
Opower	-0.67850845	0.19346704	-3.51	0.0005
overall_BA	-1.95574749	0.25202793	-7.76	<.0001

Estimated Achieved Level Model

Number of Observations Read 168777
Number of Observations Used 168777

Dependent Variable: kwhd

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6071	147840074.0	24351.8	48.96	<.0001
Error	162705	80931806.6	497.4		
Corrected Total	168776	228771880.6			

R-Square 0.646234
Coeff Var 49.19065
Root MSE 22.30279
kwhd Mean 45.33949

Source	DF	Type I SS	Mean Square	F Value	Pr > F
ConcatID	5989	120689498.7	20151.9	40.51	<.0001
monthly_avg_*monthID	71	27105012.8	381760.7	767.49	<.0001
APPLpt	1	3808.9	3808.9	7.66	0.0057
INSUpt	1	6.5	6.5	0.01	0.9092
HT94pt	1	3856.5	3856.5	7.75	0.0054
CLRNpt	1	709.5	709.5	1.43	0.2323
CLRRpt	1	331.1	331.1	0.67	0.4146
CTRLpt	1	129.6	129.6	0.26	0.6097
CECpt	1	2858.4	2858.4	5.75	0.0165
Opower	1	6636.7	6636.7	13.34	0.0003
11	1	7030.7	7030.7	14.13	0.0002
12	1	20194.2	20194.2	40.60	<.0001
13	1	0.3	0.3	0.00	0.9792

Source	DF	Type III SS	Mean Square	F Value	Pr > F
monthly_avg_*monthID	71	27030439.48	380710.42	765.38	<.0001
APPLpt	1	4416.29	4416.29	8.88	0.0029
INSUpt	1	6.41	6.41	0.01	0.9096
HT94pt	1	3299.56	3299.56	6.63	0.0100
CLRNpt	1	689.45	689.45	1.39	0.2391
CLRRpt	1	411.44	411.44	0.83	0.3631
CTRLpt	1	244.13	244.13	0.49	0.4836
CECpt	1	2994.74	2994.74	6.02	0.0141
Opower	1	6326.08	6326.08	12.72	0.0004
11	1	11056.84	11056.84	22.23	<.0001
12	1	19922.00	19922.00	40.05	<.0001
13	1	0.34	0.34	0.00	0.9792

Parameter	Estimate	Standard Error	t Value	Pr > t
monthly_avg_*monthID 20080201	-0.73881841	0.06559548	-11.26	<.0001
monthly_avg_*monthID 20080301	-0.62726650	0.02701452	-23.22	<.0001
monthly_avg_*monthID 20080401	-0.73855207	0.01608215	-45.92	<.0001
monthly_avg_*monthID 20080501	-0.71303739	0.01204187	-59.21	<.0001
monthly_avg_*monthID 20080601	-0.65127938	0.01011332	-64.40	<.0001
monthly_avg_*monthID 20080701	-0.52385553	0.00904610	-57.91	<.0001
monthly_avg_*monthID 20080801	-0.53625803	0.00913667	-58.69	<.0001
monthly_avg_*monthID 20080901	-0.69903603	0.01059192	-66.00	<.0001

monthly_avg_*monthID	20081001	-0.73828325	0.01342617	-54.99	<.0001
monthly_avg_*monthID	20081101	-0.60418986	0.01976962	-30.56	<.0001
monthly_avg_*monthID	20081201	0.03269033	0.08392479	0.39	0.6969
monthly_avg_*monthID	20090101	-0.39641433	0.12722149	-3.12	0.0018
monthly_avg_*monthID	20090201	-0.68815732	0.04527652	-15.20	<.0001
monthly_avg_*monthID	20090301	-0.54317231	0.02414946	-22.49	<.0001
monthly_avg_*monthID	20090401	-0.69850952	0.01474853	-47.36	<.0001
monthly_avg_*monthID	20090501	-0.69986213	0.01138361	-61.48	<.0001
monthly_avg_*monthID	20090601	-0.64135624	0.00979888	-65.45	<.0001
monthly_avg_*monthID	20090701	-0.59054623	0.00934779	-63.17	<.0001
monthly_avg_*monthID	20090801	-0.58907494	0.00933966	-63.07	<.0001
monthly_avg_*monthID	20090901	-0.61054704	0.00956239	-63.85	<.0001
monthly_avg_*monthID	20091001	-0.72799804	0.01508271	-48.27	<.0001
monthly_avg_*monthID	20091101	-0.58095786	0.01577334	-36.83	<.0001
monthly_avg_*monthID	20091201	-0.17311952	0.05447790	-3.18	0.0015
monthly_avg_*monthID	20100101	-0.06826751	0.06813373	-1.00	0.3164
monthly_avg_*monthID	20100201	-0.99045125	0.05294406	-18.71	<.0001
monthly_avg_*monthID	20100301	-0.59890702	0.01725827	-34.70	<.0001
monthly_avg_*monthID	20100401	-0.70129692	0.01214092	-57.76	<.0001
monthly_avg_*monthID	20100501	-0.68265500	0.01085850	-62.87	<.0001
monthly_avg_*monthID	20100601	-0.60376497	0.00946729	-63.77	<.0001
monthly_avg_*monthID	20100701	-0.46398633	0.00854271	-54.31	<.0001
monthly_avg_*monthID	20100801	-0.47105453	0.00852092	-55.28	<.0001
monthly_avg_*monthID	20100901	-0.71866850	0.01082176	-66.41	<.0001
monthly_avg_*monthID	20101001	-0.71252571	0.01213229	-58.73	<.0001
monthly_avg_*monthID	20101101	-0.63651732	0.01974309	-32.24	<.0001
monthly_avg_*monthID	20101201	-0.13581508	0.05392826	-2.52	0.0118
monthly_avg_*monthID	20110101	-0.06027111	0.11981477	-0.50	0.6149
monthly_avg_*monthID	20110201	-0.79140203	0.04847264	-16.33	<.0001
monthly_avg_*monthID	20110301	-0.60304695	0.02621395	-23.00	<.0001
monthly_avg_*monthID	20110401	-0.66415633	0.01411671	-47.05	<.0001
monthly_avg_*monthID	20110501	-0.67584134	0.01095229	-61.71	<.0001
monthly_avg_*monthID	20110601	-0.59575257	0.00920186	-64.74	<.0001
monthly_avg_*monthID	20110701	-0.41785719	0.00821886	-50.84	<.0001
monthly_avg_*monthID	20110801	-0.48881502	0.00858266	-56.95	<.0001
monthly_avg_*monthID	20110901	-0.68009131	0.01030829	-65.98	<.0001
monthly_avg_*monthID	20111001	-0.70225377	0.01157935	-60.65	<.0001
monthly_avg_*monthID	20111101	-0.67885481	0.01807546	-37.56	<.0001
monthly_avg_*monthID	20111201	-0.48899788	0.02449102	-19.97	<.0001
monthly_avg_*monthID	20120101	-0.49247690	0.03106800	-15.85	<.0001
monthly_avg_*monthID	20120201	-0.74133413	0.02776867	-26.70	<.0001
monthly_avg_*monthID	20120301	-0.63829488	0.01433572	-44.52	<.0001
monthly_avg_*monthID	20120401	-0.78332604	0.01272854	-61.54	<.0001
monthly_avg_*monthID	20120501	-0.67898758	0.01012758	-67.04	<.0001
monthly_avg_*monthID	20120601	-0.54760471	0.00871745	-62.82	<.0001
monthly_avg_*monthID	20120701	-0.38926392	0.00779616	-49.93	<.0001
monthly_avg_*monthID	20120801	-0.52745250	0.00873657	-60.37	<.0001
monthly_avg_*monthID	20120901	-0.67995832	0.01017603	-66.82	<.0001
monthly_avg_*monthID	20121001	-0.74845534	0.01377722	-54.33	<.0001
monthly_avg_*monthID	20121101	-0.76541672	0.01973072	-38.79	<.0001
monthly_avg_*monthID	20121201	-1.88619720	0.03827107	-49.29	<.0001
monthly_avg_*monthID	20130101	0.20157565	0.06197858	3.25	0.0011
monthly_avg_*monthID	20130201	-0.59526035	0.05336594	-11.15	<.0001
monthly_avg_*monthID	20130301	-0.49229407	0.03516958	-14.00	<.0001
monthly_avg_*monthID	20130401	-0.65723889	0.01943958	-33.81	<.0001
monthly_avg_*monthID	20130501	-0.59596549	0.01209992	-49.25	<.0001
monthly_avg_*monthID	20130601	-0.53462122	0.00993127	-53.83	<.0001
monthly_avg_*monthID	20130701	-0.43503925	0.00928330	-46.86	<.0001
monthly_avg_*monthID	20130801	-0.45903584	0.00934133	-49.14	<.0001
monthly_avg_*monthID	20130901	-0.55201173	0.01046956	-52.73	<.0001
monthly_avg_*monthID	20131001	-0.65187814	0.01489604	-43.76	<.0001
monthly_avg_*monthID	20131101	-0.55216624	0.02490850	-22.17	<.0001
monthly_avg_*monthID	20131201	-4.37750337	0.13840175	-31.63	<.0001
APPLpt		-6.03286294	2.02466871	-2.98	0.0029
INSUpt		0.38460330	3.38875700	0.11	0.9096
HT94pt		-2.34072754	0.90882869	-2.58	0.0100
CLRNpt		20.18660771	17.14636103	1.18	0.2391
CLRRpt		5.57301933	6.12769452	0.91	0.3631
CTRLpt		0.48073973	0.68621055	0.70	0.4836

CECpt	4.64215925	1.89190557	2.45	0.0141
Opower	-0.68990053	0.19345432	-3.57	0.0004
11	-1.69727946	0.35999549	-4.71	<.0001
12	-2.77961582	0.43921532	-6.33	<.0001
13	0.02366977	0.90698170	0.03	0.9792

Estimated Tool Use Model

Number of Observations Read 168777
Number of Observations Used 168777

Dependent Variable: kwhd

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6071	147856072.6	24354.5	48.97	<.0001
Error	162705	80915808.1	497.3		
Corrected Total	168776	228771880.6			

R-Square 0.646304
Coeff Var 49.18578
Root MSE 22.30058
kwhd Mean 45.33949

Source	DF	Type I SS	Mean Square	F Value	Pr > F
ConcatID	5989	120689498.7	20151.9	40.52	<.0001
monthly_avg_*monthID	71	27105012.8	381760.7	767.64	<.0001
APPLpt	1	3808.9	3808.9	7.66	0.0057
INSUpt	1	6.5	6.5	0.01	0.9092
HT94pt	1	3856.5	3856.5	7.75	0.0054
CLRNpt	1	709.5	709.5	1.43	0.2323
CLRRpt	1	331.1	331.1	0.67	0.4146
CTRLpt	1	129.6	129.6	0.26	0.6097
CECpt	1	2858.4	2858.4	5.75	0.0165
Opower	1	6636.7	6636.7	13.35	0.0003
Used_Home_Analyzer	1	16314.3	16314.3	32.80	<.0001
used_BA	1	13597.8	13597.8	27.34	<.0001
used_CSR	1	13311.8	13311.8	26.77	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
monthly_avg_*monthID	71	26984085.48	380057.54	764.22	<.0001
APPLpt	1	4653.20	4653.20	9.36	0.0022
INSUpt	1	24.32	24.32	0.05	0.8250
HT94pt	1	3027.35	3027.35	6.09	0.0136
CLRNpt	1	683.97	683.97	1.38	0.2409
CLRRpt	1	399.15	399.15	0.80	0.3703
CTRLpt	1	332.97	332.97	0.67	0.4132
CECpt	1	3647.31	3647.31	7.33	0.0068
Opower	1	6138.40	6138.40	12.34	0.0004
Used_Home_Analyzer	1	3112.01	3112.01	6.26	0.0124
used_BA	1	12544.24	12544.24	25.22	<.0001
used_CSR	1	13311.78	13311.78	26.77	<.0001

Parameter	Estimate	Standard Error	t Value	Pr > t
monthly_avg_*monthID 20080201	-0.75141085	0.06562576	-11.45	<.0001
monthly_avg_*monthID 20080301	-0.63264589	0.02702818	-23.41	<.0001
monthly_avg_*monthID 20080401	-0.74185358	0.01609061	-46.10	<.0001
monthly_avg_*monthID 20080501	-0.71561780	0.01204883	-59.39	<.0001
monthly_avg_*monthID 20080601	-0.65332548	0.01011871	-64.57	<.0001
monthly_avg_*monthID 20080701	-0.52574880	0.00905116	-58.09	<.0001
monthly_avg_*monthID 20080801	-0.53819372	0.00914198	-58.87	<.0001
monthly_avg_*monthID 20080901	-0.70133053	0.01059829	-66.17	<.0001

monthly_avg_*monthID	20081001	-0.74122682	0.01343459	-55.17	<.0001
monthly_avg_*monthID	20081101	-0.60850029	0.01978206	-30.76	<.0001
monthly_avg_*monthID	20081201	0.01536593	0.08397091	0.18	0.8548
monthly_avg_*monthID	20090101	-0.41512410	0.12725410	-3.26	0.0011
monthly_avg_*monthID	20090201	-0.69717360	0.04530379	-15.39	<.0001
monthly_avg_*monthID	20090301	-0.54673114	0.02416289	-22.63	<.0001
monthly_avg_*monthID	20090401	-0.70060161	0.01475655	-47.48	<.0001
monthly_avg_*monthID	20090501	-0.70142875	0.01138948	-61.59	<.0001
monthly_avg_*monthID	20090601	-0.64258146	0.00980303	-65.55	<.0001
monthly_avg_*monthID	20090701	-0.59160218	0.00935112	-63.27	<.0001
monthly_avg_*monthID	20090801	-0.59004297	0.00934249	-63.16	<.0001
monthly_avg_*monthID	20090901	-0.61133426	0.00956477	-63.92	<.0001
monthly_avg_*monthID	20091001	-0.72908628	0.01508615	-48.33	<.0001
monthly_avg_*monthID	20091101	-0.58171529	0.01577648	-36.87	<.0001
monthly_avg_*monthID	20091201	-0.17493041	0.05448454	-3.21	0.0013
monthly_avg_*monthID	20100101	-0.07009375	0.06813861	-1.03	0.3036
monthly_avg_*monthID	20100201	-0.99160411	0.05294434	-18.73	<.0001
monthly_avg_*monthID	20100301	-0.59915628	0.01725812	-34.72	<.0001
monthly_avg_*monthID	20100401	-0.70130705	0.01214051	-57.77	<.0001
monthly_avg_*monthID	20100501	-0.68257851	0.01085794	-62.86	<.0001
monthly_avg_*monthID	20100601	-0.60368294	0.00946681	-63.77	<.0001
monthly_avg_*monthID	20100701	-0.46386763	0.00854213	-54.30	<.0001
monthly_avg_*monthID	20100801	-0.47091215	0.00852025	-55.27	<.0001
monthly_avg_*monthID	20100901	-0.71839179	0.01082071	-66.39	<.0001
monthly_avg_*monthID	20101001	-0.71206897	0.01213109	-58.70	<.0001
monthly_avg_*monthID	20101101	-0.63569620	0.01974124	-32.20	<.0001
monthly_avg_*monthID	20101201	-0.13334224	0.05392353	-2.47	0.0134
monthly_avg_*monthID	20110101	-0.05428245	0.11980531	-0.45	0.6505
monthly_avg_*monthID	20110201	-0.78836600	0.04846954	-16.27	<.0001
monthly_avg_*monthID	20110301	-0.60058564	0.02621388	-22.91	<.0001
monthly_avg_*monthID	20110401	-0.66279340	0.01411675	-46.95	<.0001
monthly_avg_*monthID	20110501	-0.67470606	0.01095246	-61.60	<.0001
monthly_avg_*monthID	20110601	-0.59474793	0.00920203	-64.63	<.0001
monthly_avg_*monthID	20110701	-0.41701402	0.00821897	-50.74	<.0001
monthly_avg_*monthID	20110801	-0.48779133	0.00858314	-56.83	<.0001
monthly_avg_*monthID	20110901	-0.67888776	0.01030872	-65.86	<.0001
monthly_avg_*monthID	20111001	-0.70070817	0.01158068	-60.51	<.0001
monthly_avg_*monthID	20111101	-0.67662672	0.01807683	-37.43	<.0001
monthly_avg_*monthID	20111201	-0.48572253	0.02449384	-19.83	<.0001
monthly_avg_*monthID	20120101	-0.48825811	0.03107197	-15.71	<.0001
monthly_avg_*monthID	20120201	-0.73631447	0.02777776	-26.51	<.0001
monthly_avg_*monthID	20120301	-0.63540035	0.01434198	-44.30	<.0001
monthly_avg_*monthID	20120401	-0.78046913	0.01273632	-61.28	<.0001
monthly_avg_*monthID	20120501	-0.67673175	0.01013355	-66.78	<.0001
monthly_avg_*monthID	20120601	-0.54555352	0.00872373	-62.54	<.0001
monthly_avg_*monthID	20120701	-0.38740775	0.00780202	-49.65	<.0001
monthly_avg_*monthID	20120801	-0.52514715	0.00874495	-60.05	<.0001
monthly_avg_*monthID	20120901	-0.67710685	0.01018739	-66.47	<.0001
monthly_avg_*monthID	20121001	-0.74448781	0.01379440	-53.97	<.0001
monthly_avg_*monthID	20121101	-0.75969510	0.01975586	-38.45	<.0001
monthly_avg_*monthID	20121201	-1.86995632	0.03836907	-48.74	<.0001
monthly_avg_*monthID	20130101	0.22877341	0.06214215	3.68	0.0002
monthly_avg_*monthID	20130201	-0.57131212	0.05351985	-10.67	<.0001
monthly_avg_*monthID	20130301	-0.47645541	0.03527354	-13.51	<.0001
monthly_avg_*monthID	20130401	-0.64762007	0.01951342	-33.19	<.0001
monthly_avg_*monthID	20130501	-0.59017934	0.01214238	-48.60	<.0001
monthly_avg_*monthID	20130601	-0.52967063	0.00997119	-53.12	<.0001
monthly_avg_*monthID	20130701	-0.43040497	0.00931999	-46.18	<.0001
monthly_avg_*monthID	20130801	-0.45430857	0.00938018	-48.43	<.0001
monthly_avg_*monthID	20130901	-0.54686990	0.01051037	-52.03	<.0001
monthly_avg_*monthID	20131001	-0.64458494	0.01495362	-43.11	<.0001
monthly_avg_*monthID	20131101	-0.54054629	0.02499387	-21.63	<.0001
monthly_avg_*monthID	20131201	-4.33379969	0.13859781	-31.27	<.0001
APPLpt		-6.19242039	2.02442086	-3.06	0.0022
INSUpt		0.74876752	3.38594826	0.22	0.8250
HT94pt		-2.24220267	0.90878259	-2.47	0.0136
CLRNpt		20.10633764	17.14467377	1.17	0.2409
CLRRpt		5.48917022	6.12712552	0.90	0.3703
CTRLpt		0.56146378	0.68617880	0.82	0.4132

CECpt	5.12577472	1.89273264	2.71	0.0068
Opower	-0.67965106	0.19345268	-3.51	0.0004
Used_Home_Analyzer	-0.91408586	0.36541177	-2.50	0.0124
used_BA	-1.48279952	0.29524093	-5.02	<.0001
used_CSR	-3.96612441	0.76659251	-5.17	<.0001



Otter Tail Home Energy Reports Program: 2013 Results Report

1 Program Overview

In June 2011, Otter Tail Power Company and OPOWER launched the Home Energy Reports (HER) pilot, a behavioral program developed to boost customer engagement and reduce residential energy consumption. Selected households received a series of personalized Home Energy Reports designed to motivate and educate recipients to take actions to improve the energy efficiency of their homes.

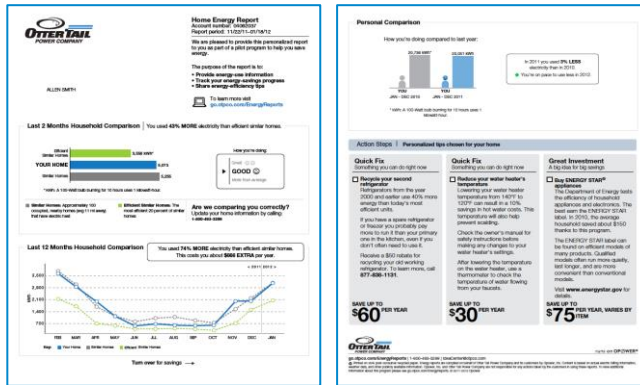
- 30,000 residential customers were originally selected to receive reports at varying frequencies (see section 3) as part of the treatment population, of which 28,828 received reports. Targeted households were all located within Otter Tail's Minnesota service area. These customers began receiving reports in July 2011 and are referred to as the Legacy wave in this document.
 - A statistically equivalent group of approximately 5000 households was selected to serve as a control population; these households did not receive reports.
 - Both samples were randomly selected from the same population to ensure unbiased measurement and verification of program results. The average annual electricity usage of the treatment population and control households was alike between 12,000-13,000 kWh.
- In November 2012, approximately 6,000 additional residential customers in Otter Tail's Minnesota service area were added to the program as a "refill" to offset attrition primarily from utility account turnover and return the program to historic volumes. Of these, 5,673 participants received reports and 5,257 remained active at the end of 2012 for carryover into 2013.
 - Because the relatively small size of the refill group was too small to maintain an independent control group, the impact of the program is measured using the Modeled Savings Protocol which was approved by the Minnesota Department of Energy Resources (formerly Office of Energy Security) in 2010. This method is discussed in more detail in Section 2.1.
- In July 2013 approximately 4,000 additional residential customers in Otter Tail's Minnesota service area were added to the program as a "refill" to offset attrition primarily from utility account turnover and return the program to historic volumes. Of these 4,665 participants received reports. The number of participants is higher than 4000 to plan for expected attrition. At the end of 2013, 4,029 remained active for carryover into 2014.
 - Because the relatively small size of the refill group was too small to maintain an independent control group, the impact of the program is measured using the Modeled Savings Protocol which was approved by the Minnesota Department of Energy Resources (formerly Office of Energy Security) in 2010. This method is discussed in more detail Section 2.1.

Each Home Energy Report contained various personalized components, including:

- Comparisons of recent energy use to a group of comparable neighbors: this section includes both normative and injunctive messages designed to motivate action.

- Comparison of recent energy use to current use, tracking household improvement over time.
- Targeted energy efficiency advice: specific tips are selected based on the home's energy use pattern, housing characteristics, and household demographics.

Figure 1: Example of an Otter Tail Home Energy Report

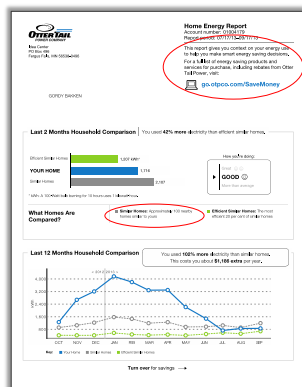


In 2013, a total of 33,649 households were active in the program. 29,400 participants remained active at the end of 2013. Of these participants, 21,093 were in the original pilot, 3,917 were of the 2012 refill and 3,733 were of the 2013 refill.

Updates to the Home Energy Report template were made in 2013 including:

- The “Johnson Box” in the upper right-hand corner of the report directs customers to rebate programs at Otter Tail website
- A standard message added to explain “What Homes Are Compared” section reducing confusion around sq. ft. comparison on reports

Figure 2: An Otter Tail Home Energy Report Highlighting 2013 Updates



Cumulatively, 114 customers chose to opt out of the program in 2013, which corresponds to an opt-out rate of 0.3%, which is low compared to the average of other Opower programs in Minnesota which have seen opt out rates between 1-3% for a program of similar maturity. In that same timeframe, 4,169 participants also



closed their electric accounts, effectively removing them from the program. Depending on when these events occurred, these customers may have received fewer than 6 reports in 2013.

Figure 3: Legacy Wave Monthly Opt-outs and Account Closures

Month	Account Closures	Opt-out
January 2013	152	12
February 2013	109	2
March 2013	115	8
April 2013	157	7
May 2013	209	7
June 2013	247	2
July 2013	188	7
August 2013	231	4
September 2013	213	13
October 2013	201	7
November 2013	137	2
December 2013	143	13
2013 Total	2102	83

Figure 4: November 2012 Refill Wave Monthly Opt-outs and Account Closures

Month	Account Closures	Opt-out
January 2013	129	1
February 2013	100	2
March 2013	87	0
April 2013	103	0
May 2013	260	0

June 2013	184	4
July 2013	146	2
August 2013	119	0
September 2013	91	2
October 2013	106	1
November 2013	54	1
December 2013	57	5
2013 Total	1436	18

Figure 5: 2013 Refill Monthly Opt-outs and Account Closures

Month	Account Closures	Opt-out
July 2013	38	0
August 2013	108	0
September 2013	162	2
October 2013	138	2
November 2013	86	0
December 2013	99	9
2013 Total	631	13

2 Savings Calculation Methodology

This section describes the criteria used to define the population eligible to receive the Home Energy Reports, the methodology for assigning homes to the treatment and control groups, the methodology for assigning homes to certain customer segments, and measurement and verification techniques used to derive program savings.

OPOWER integrates data from a variety of sources in order to ensure that the Home Energy Reports are personalized, accurate, and meaningful for all recipients. These data integration efforts also allow for detailed



analysis of energy savings results that enable the optimization of feature design and targeting of specific energy efficiency messages. The data used for the various analyses presented herein were collected from three primary sources:

1. Consumption data: Otter Tail Power Company provided Opower with weekly updates of monthly consumption data for all households in the pilot program, including historical consumption information.
2. Parcel data: Opower received data, to the extent available from a third-party vendor, about household parcels, including house size, age, and value. These data elements are static with the exception of square footage, which may be updated at the customer's request.
3. Demographic data: Opower received demographic data, to the extent available from a third-party vendor, about participants, including household income, age of occupant(s), number of occupants, and an owner/renter indicator. These fields were used to recommend customized energy-efficiency tips to customers, by using relevant demographic targeting.

The primary measure of success for the Home Energy Reports program is the difference between the average energy consumption of the homes in the treatment group and homes in the control group. Because of the statistical homogeneity of these two groups, any difference in their respective energy consumption after June 2011 (i.e. the program start) can be attributed to the Home Energy Reports.

The analysis of the Home Energy Reports program relies upon a fixed-effects regression model. The rationale for using a regression model to interpret the results of the pilot are threefold: 1) the model eliminates variability due to other factors and allow for tighter error bars around the estimate of report impact; 2) in order to isolate the impact of the Home Electricity Reports on energy use, it is appropriate to control for slight differences in the housing and demographic characteristics present in the test and control population; and 3) the model makes the search for population segments with better or worse than average impact much more manageable. This statistical methodology is standard procedure for the analysis of controlled experiments and is a well-accepted practice within the energy efficiency program measurement and verification community.¹ This was the statistical methodology used to measure results for the initial wave of 30,000 households.

2.1 Refill savings methodology

Without the benefit of a control group, Opower opted to measure the impact of the HER program via the Modeled Savings Protocol, which was approved by the Minnesota Department of Energy Resources (formerly the OES) in October, 2010. This protocol aims to leverage Opower expertise from ongoing programs in Minnesota with test and control populations, thus offering better safeguards to control for weather and other

¹ Our methodology most closely resembles the "Large Scale Data Analysis" techniques described in the Model Energy Efficiency Program Impact Evaluation Guide from the National Action Plan on Energy Efficiency (NAPEE).



conditions specific to the state. By using results from other Opower programs exclusively, we can ensure that the same expertise and program approach is used in the full utility service territory deployments as in the experimentally designed programs.

In order to infer savings for Otter Tail's refill group, we have utilized measured results from five other programs in Minnesota, including Otter Tail's own initial deployment. The other programs include Xcel Energy (there are two relevant programs here), Connexus Energy, and Lake Country Power. The regression model used to determine the refill savings is described below:

2.1.1 Regression model

For the full-deployment scenario, the regression model of program results will include regressors for heating and cooling degree days, baseline usage, housing square feet, age of the house, and a treatment variable interacted with an indicator of whether the billing period is pre- or post-treatment. Opower then scores the model based on the coefficients for treatment times post-deployment, baseline usage, housing square feet, and age of the house.

Output is a function that describes energy savings as a function of observable household or customer characteristics. The final form of the model will be determined based on the statistical significance of the candidate variables. A simplified sample equation using square footage and age of the customer's home, the number of occupants, the baseline usage in the pre-treatment period, and an indicator of whether the customer owns or rents their home is given below:

$$\text{Savings} = b_0 + b_1(\text{sqft}) + b_2(\text{age}) + b_3(\# \text{ of occupants}) + b_4(\text{baseline usage}) + b_5(\text{owner})$$

Model output will be the result of a similar equation, depending on the statistically significant variables.

The average of the "scored" savings is the predicted per household savings for each customer in the utility. Multiplying this score by the number of customers yields the total savings over the time period in question.

Opower recognizes that because this methodology does not employ experimental design, it may be prudent to adjust the savings percentage accordingly. The resolved solution is to cap the savings calculated through this protocol at the maximum measured savings across the experimentally designed programs in Minnesota.

3 Program Energy Savings

The program demonstrated a clear and significant reduction in residential energy consumption. Total savings for the program in 2013 were 4,861 MWhs.

Over the life of the program, the initial legacy customers delivered a reduction in electricity consumption of 10,839 MWh, which corresponds to a cumulative percentage reduction in usage (relative to the control population) of 1.5% (+/- 0.5%). Measurement is based on 95% statistical confidence intervals. This reduction corresponds to 456 kWh saved per household for the 30-month program measurement period. The



maximum monthly percentage savings rate was achieved in June 2012 (3.1%, corresponding to 586 MWh of savings).

Due to the size of the refill population, the group is too little for monthly statistical measurement. As a result, the savings for this group will be modeled on an annual basis for regulatory reporting. The month-by-month breakdown of program MWh savings is presented in Figure 6 for the legacy households and refill, respectively.

Figure 6: Monthly Electric Savings Impact (through December 31, 2012).

Month	Legacy MWh Savings (Measured)	2012 Refill MWh Savings (Modeled)	2013 Refill MWh Savings (Modeled)
January 2013	400	39	
February 2013	564	25	
March 2013	271	38	
April 2013	296	36	
May 2013	339	36	
June 2013	362	33	
July 2013	385	33	
August 2013	444	32	19
September 2013	227	31	18
October 2013	418	31	18
November 2013	252	29	17
December 2013	408	30	18
2013 Total	4,367	404	90

4 Program design and tests

Otter Tail's Home Energy Reports program was designed to measure the effect of several enhancements on program savings impact. This is accomplished through tests and enhancements that were implemented in order to generate learning's that can lead to the adoption of best practices in the future years of the program.

4.1 Report frequency test

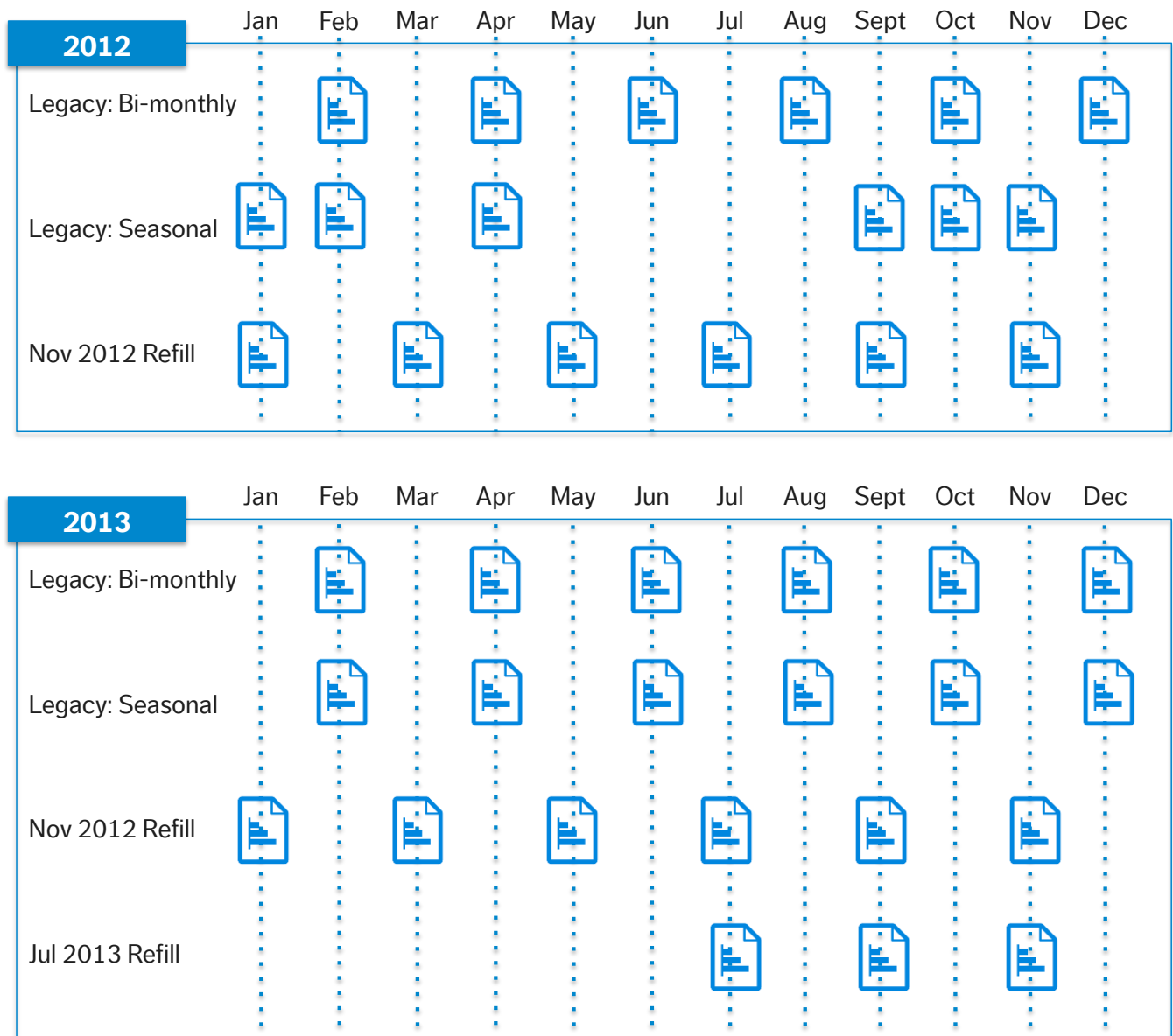
Home Energy Report recipients were divided into two equal sized groups, each of 15,000 household, to receive two different frequencies of reports. The first group received reports on a bimonthly schedule starting in June of 2011 and then every even month thereafter. At the same time, the second group received a “seasonal” frequency track where reports are clustered in peak seasons. The specific months of report generation for 2012 are displayed in figure 7 below.

Figure 7: Report Generation Months 2012

Group A (Bi-Monthly)	Group B (Seasonal)
February	January
April	February
June	April
August	September
October	October
December	November

At the end of 2012, the “seasonal” frequency group began receiving the standard “bi-monthly” reports. The program design through 2012 and 2013 are illustrated below.

Figure 8: Program Design for 2012 and 2013



The results found that early in the program (June 2010 through December 2012), customers who received reports on a seasonal frequency saved at a slightly higher rate than customers who received reports on a bimonthly frequency. However, as the program matured, the difference in savings between the two groups diminished. Cumulatively, the seasonal frequency saved at a rate of 1.67% while the bimonthly frequency track saved at a rate of 1.60%. As shown in the Figure 9, variation in the test groups diminishes as program maturity increases. Cumulatively, the seasonal group had a higher Opt-Out rate (1.22%) than the bimonthly group (1.16%).

Figure 9: Monthly savings rate for frequency test

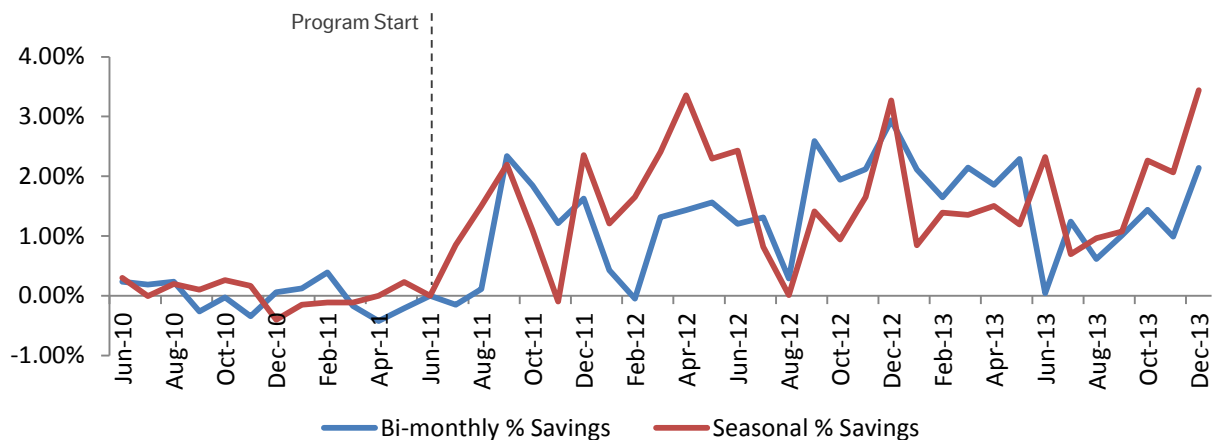


Figure 10: Opt-out rate since June 2011

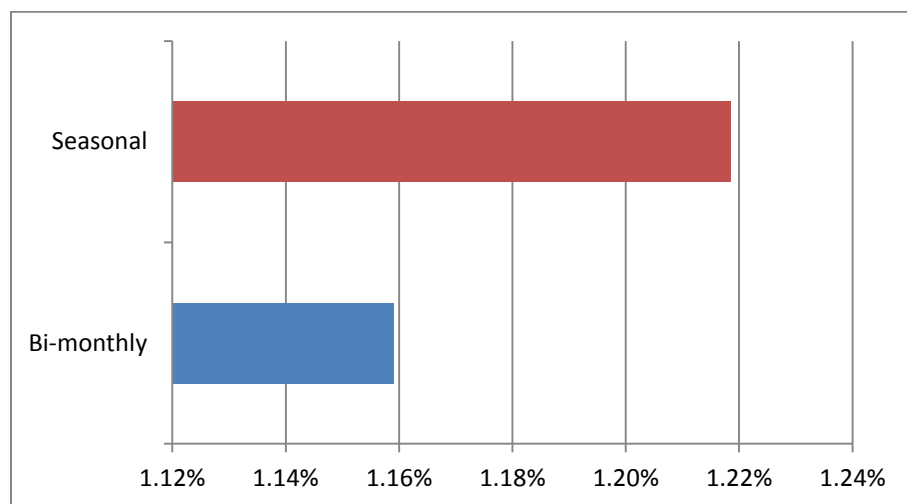
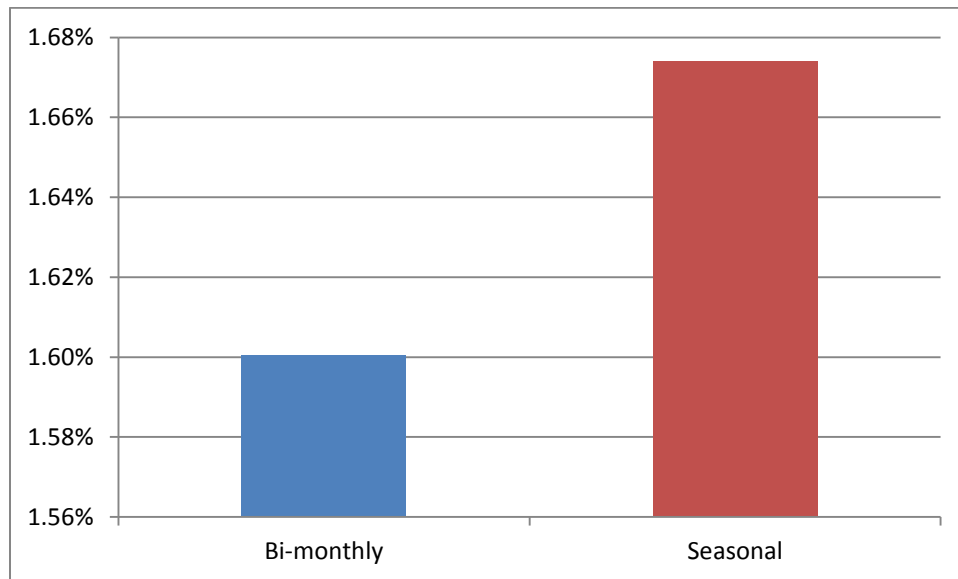


Figure 11: Cumulative savings rate since June 2011



The refill customers were not included in the frequency test, and at the close of 2012 the two frequencies were merged into a single track that will receive bimonthly reports.

Appendix C- Project Information Sheets

2010	2011	2012	2013
\$5,063,317	\$4,344,575	\$4,816,005	\$5,213,033
3.7%	3.1%	3.5%	3.8%
\$4,068,011	\$3,720,187	\$3,733,700	\$3,865,181
344.8%	205.1%	227.8%	265.1%
13,775,005	\$147,155	\$139,704	\$449,850
0.4%	0.3%	0.2%	0.2%
0	0	0	0
0	0	0	0
\$6,126,029	\$5,860,814	\$5,656,134	\$5,742,017
\$6,126,029	\$5,860,814	\$5,656,134	\$5,742,017
1.5%	1.2%	1.3%	1.7%

[illegible]

Exemptions - Otter Tail Power

2013		
Year	kWh Sales	GOR (\$)
2007		
2008		
2009		
2013 Adjustment	0	0

2012		
Year	kWh Sales	GOR (\$)
2007		
2008		
2009		
2012 Adjustment	0	0

2011		
Year	kWh Sales	GOR (\$)
2007		
2008		
2009		
2011 Adjustment	0	0

2010		
Year	kWh Sales	GOR (\$)
2005		
2006		
2007		
2010 Adjustment	0	0

2009		
Year	kWh Sales	GOR (\$)
2005		
2006		
2007		
2009 Adjustment	0	0

2008		
Year	kWh Sales	GOR (\$)
2004		
2005		
2006		
2008 Adjustment	0	0

Program Name: Accounting Adjustments
Program Design Manager: Otter Tail Power
Category: Other - Indirect

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)		\$0.00	\$0.00				
Delivery (2011-present)				\$0.00	\$0.00		
Administration (2011-present)				\$0.00	\$0.00		
Evaluation, Measurement & Verification		\$0.00	\$0.00	\$0.00	\$0.00		
Advertising & Promotion		\$0.00	\$0.00	\$0.00	\$0.00		
Incentives		\$0.00	\$0.00	\$0.00	\$0.00		
Other		(\$279.00)	\$13,209.00	(\$41,245.00)	(\$71.00)	(\$16.93)	
Total Utility Costs	\$0.00	(\$279.00)	\$13,209.00	(\$41,245.00)	(\$71.00)	(\$16.93)	\$0.00
Program Participants							
Total Participants		0	0	0	0		
% of Spending by Customer Segments							
Residential		0%	0%	0%	0%		
Commercial		0%	0%	0%	0%		
Industrial		0%	0%	0%	0%		
Farm		0%	0%	0%	0%		
Other		100%	100%	100%	100%		
Total % of Spending	0%	100%	100%	100%	100%	0%	0%
Low-Income Participation							
Participant % (% of Total Participants)		0.0%	0.0%	0.0%	0.0%		
Budget % (% of Total Utility Costs)		0.0%	0.0%	0.0%	0.0%		
Energy Savings							
Annual kWh Savings @ Meter		0	0	0	0	0	
Annual kWh Savings @ Generator		0	0	0	0	0	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter		0.000	0.000	0.000	0.000	0.000	
Peak kW Savings @ Generator		0.000	0.000	0.000	0.000	0.000	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV							
Ratepayer Ratio							
Ratepayer NPV							
Participant Ratio							
Participant NPV							
Societal Ratio							
Societal NPV							
Narrative							

Program Name: Adj. Speed Drives
Program Design Manager: Otter Tail Power
Category: Motors & Drives

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)		\$18,242.00	\$0.00				
Delivery (2011-present)				\$33,087.00	\$27,781.00	\$31,679.40	
Administration (2011-present)				\$5,515.00	\$7,691.00	\$12,852.07	
Evaluation, Measurement & Verification		\$4,147.00	\$0.00	\$3,254.00	\$2,709.00	\$1,542.85	
Advertising & Promotion		\$3,568.00	\$0.00	\$2,315.00	\$2,323.00	\$3,147.16	
Incentives		\$115,128.00	\$0.00	\$293,480.00	\$199,373.00	\$313,474.50	
Other		\$0.00	\$449,395.00	\$0.00	\$0.00	\$0.00	
Total Utility Costs	\$0.00	\$141,085.00	\$449,395.00	\$337,651.00	\$239,877.00	\$362,695.98	\$0.00
Program Participants							
Total Participants		59	209	213	118	121	
% of Spending by Customer Segments							
Residential		0%	0%	0%	0%	0%	
Commercial		30%	30%	30%	30%	30%	
Industrial		70%	70%	70%	70%	70%	
Farm		0%	0%	0%	0%	0%	
Other		0%	0%	0%	0%	0%	
Total % of Spending	0%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)		0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)		0.0%	0.0%	0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter		1,846,536	4,877,777	4,782,225	2,332,402	5,927,567	
Annual kWh Savings @ Generator		1,846,536	4,877,777	4,782,225	2,332,402	6,408,181	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0764	\$0.0921	\$0.0706	\$0.1028	\$0.0566	\$0.0000
Peak kW Savings @ Meter		227.610	601.280	591.075	288.600	732.730	
Peak kW Savings @ Generator		227.610	601.280	591.075	288.600	792.141	
Cost per Peak kW Saved @ Generator	\$0.00	\$619.85	\$747.40	\$571.25	\$831.17	\$457.87	\$0.00
Benefit/Cost Ratios							
Utility Ratio						18.16	
Utility NPV						\$6,115,120	
Ratepayer Ratio						1.31	
Ratepayer NPV						\$1,577,026	
Participant Ratio						2.53	
Participant NPV						\$3,128,058	
Societal Ratio						4.04	
Societal NPV						\$6,387,057	
Narrative							

Program Name: Advertising & Ed - Bill Analyzer
Program Design Manager: Otter Tail Power
Category: Other - Direct

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)	\$166,712.00	\$173,098.00					
Delivery (2011-present)							
Administration (2011-present)							
Evaluation, Measurement & Verification		\$0.00					
Advertising & Promotion		\$0.00					
Incentives		\$0.00					
Other		\$0.00					
Total Utility Costs	\$166,712.00	\$173,098.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Program Participants							
Total Participants		1,830	2,204				
% of Spending by Customer Segments							
Residential		100%	100%				
Commercial		0%	0%				
Industrial		0%	0%				
Farm		0%	0%				
Other		0%	0%				
Total % of Spending	0%	100%	100%	0%	0%	0%	0%
Low-Income Participation							
Participant % (% of Total Participants)		0.0%	0.0%				
Budget % (% of Total Utility Costs)		0.0%	0.0%				
Energy Savings							
Annual kWh Savings @ Meter		215,763	650,906				
Annual kWh Savings @ Generator		215,763	650,906				
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.8023	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter		77.930	235.090				
Peak kW Savings @ Generator		77.930	235.090				
Cost per Peak kW Saved @ Generator	\$0.00	\$2,221.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV							
Ratepayer Ratio							
Ratepayer NPV							
Participant Ratio							
Participant NPV							
Societal Ratio							
Societal NPV							
Narrative							

Program Name: Advertising & Ed - Commercial
Program Design Manager: Otter Tail Power
Category: Other - Indirect

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)		\$6,589.00	\$2,555.00				
Delivery (2011-present)				\$3,412.00	\$1,302.00	\$583.48	
Administration (2011-present)				\$140.00	\$121.00	\$213.96	
Evaluation, Measurement & Verification		\$0.00	\$0.00	\$49.00	\$30.00	\$39.79	
Advertising & Promotion		\$0.00	\$0.00	\$0.00	\$2,538.00	\$2,744.77	
Incentives		\$0.00	\$0.00	\$0.00	\$0.00		
Other		\$0.00	\$0.00	\$19.00	\$0.00		
Total Utility Costs	\$0.00	\$6,589.00	\$2,555.00	\$3,620.00	\$3,991.00	\$3,582.00	\$0.00
Program Participants							
Total Participants		103	109	115	84	84	
% of Spending by Customer Segments							
Residential		0%	0%	0%	0%		
Commercial		100%	100%	100%	100%	100%	
Industrial		0%	0%	0%	0%		
Farm		0%	0%	0%	0%		
Other		0%	0%	0%	0%		
Total % of Spending	0%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)		0.0%	0.0%	0.0%	0.0%		
Budget % (% of Total Utility Costs)		0.0%	0.0%	0.0%	0.0%		
Energy Savings							
Annual kWh Savings @ Meter		0	0	0	0	0	
Annual kWh Savings @ Generator		0	0	0	0	0	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter		0.000	0.000	0.000	0.000	0.000	
Peak kW Savings @ Generator		0.000	0.000	0.000	0.000	0.000	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV						(\$3,582)	
Ratepayer Ratio							
Ratepayer NPV						(\$3,582)	
Participant Ratio							
Participant NPV						\$0	
Societal Ratio							
Societal NPV						(\$3,582)	
Narrative							

Program Name: Advertising & Ed - Residential
Program Design Manager: Otter Tail Power
Category: Other - Indirect

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)	\$0.00	\$0.00	\$0.00				
Delivery (2011-present)				\$175,684.00	\$57,083.00	\$23,737.07	
Administration (2011-present)				\$7,198.00	\$5,310.00	\$8,704.07	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00	\$2,534.00	\$1,336.00	\$1,618.76	
Advertising & Promotion	\$0.00	\$0.00	\$0.00	\$0.00	\$111,226.00	\$111,661.39	
Incentives	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Other	\$166,712.00	\$193,098.00	\$260,683.00	\$971.00	\$0.00		
Total Utility Costs	\$166,712.00	\$193,098.00	\$260,683.00	\$186,387.00	\$174,955.00	\$145,721.29	\$0.00
Program Participants							
Total Participants	3,820	7,931	5,587	13,100	26,472	71,506	
% of Spending by Customer Segments							
Residential	100%	100%	100%	100%	100%	100%	
Commercial	0%	0%	0%	0%	0%		
Industrial	0%	0%	0%	0%	0%		
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Energy Savings							
Annual kWh Savings @ Meter	0	215,763	650,906	0	0	0	
Annual kWh Savings @ Generator	0	215,763	650,906	0	0	0	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.8950	\$0.4005	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter	0.000	77.700	234.950	0.000	0.000	0.000	
Peak kW Savings @ Generator	0.000	77.700	234.950	0.000	0.000	0.000	
Cost per Peak kW Saved @ Generator	\$0.00	\$2,485.17	\$1,109.53	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV						(\$145,721)	
Ratepayer Ratio							
Ratepayer NPV						(\$145,721)	
Participant Ratio							
Participant NPV						\$0	
Societal Ratio							
Societal NPV						(\$145,721)	
Narrative							

Program Name: Air Conditioning Control - C/I
Program Design Manager: Otter Tail Power
Category: Non-Residential Load Management

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Inactive	Inactive	Inactive	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)							
Delivery (2011-present)					\$6,025.00	\$1,434.75	
Administration (2011-present)					\$0.00	\$4,754.81	
Evaluation, Measurement & Verification					\$0.00	\$46.32	
Advertising & Promotion					\$0.00	\$0.00	
Incentives					\$0.00	\$750.00	
Other					\$0.00	\$0.00	
Total Utility Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$6,025.00	\$6,985.88	\$0.00
Program Participants							
Total Participants					4	16	
% of Spending by Customer Segments							
Residential					0%	0%	
Commercial					100%	100%	
Industrial					0%		
Farm					0%		
Other					0%		
Total % of Spending	0%	0%	0%	0%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)					0.0%	0.0%	
Budget % (% of Total Utility Costs)					0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter					316	90	
Annual kWh Savings @ Generator					316	97	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$19.0665	\$71.7993	\$0.0000
Peak kW Savings @ Meter					14.162	4.052	
Peak kW Savings @ Generator					14.162	4.381	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$425.43	\$1,594.75	\$0.00
Benefit/Cost Ratios							
Utility Ratio						1.80	
Utility NPV						\$2,109	
Ratepayer Ratio						1.28	
Ratepayer NPV						\$2,010	
Participant Ratio							
Participant NPV						\$853	
Societal Ratio						1.83	
Societal NPV						\$5,159	
Narrative							

Program Name: Air Conditioning Control - Res
Program Design Manager: Otter Tail Power
Category: Residential Load Management

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)	\$0.00	\$0.00	\$0.00				
Delivery (2011-present)				\$38,907.00	\$35,893.00	\$33,266.54	
Administration (2011-present)				\$7,956.00	\$8,711.00	\$12,428.87	
Evaluation, Measurement & Verification	\$0.00	\$3,293.00	\$0.00	\$206.00	\$1,971.00	\$1,836.73	
Advertising & Promotion	\$0.00	\$1,162.00	\$0.00	\$8,400.00	\$14,612.00	\$7,780.36	
Incentives	\$0.00	\$16,653.00	\$0.00	\$0.00	\$0.00	\$0.00	
Other	\$56,665.00	\$36,593.00	\$63,601.00	\$0.00	\$0.00	\$0.00	
Total Utility Costs	\$56,665.00	\$57,701.00	\$63,601.00	\$55,469.00	\$61,187.00	\$55,312.50	\$0.00
Program Participants							
Total Participants	562	605	84	102	119	101	
% of Spending by Customer Segments							
Residential	100%	100%	100%	100%	100%	100%	
Commercial	0%	0%	0%	0%	0%		
Industrial	0%	0%	0%	0%	0%		
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Energy Savings							
Annual kWh Savings @ Meter	25,432	27,312	3,793	4,604	5,372	4,560	
Annual kWh Savings @ Generator	25,432	27,312	3,793	4,604	5,372	4,930	
Cost per Annual kWh Saved @ Generator	\$2.2281	\$2.1127	\$16.7680	\$12.0480	\$11.3900	\$11.2202	\$0.0000
Peak kW Savings @ Meter	0.000	541.440	74.925	91.575	106.375	90.391	
Peak kW Savings @ Generator	0.000	541.440	74.925	91.575	106.375	97.720	
Cost per Peak kW Saved @ Generator	\$0.00	\$106.57	\$848.86	\$605.72	\$575.20	\$566.03	\$0.00
Benefit/Cost Ratios							
Utility Ratio						3.70	
Utility NPV						\$149,483	
Ratepayer Ratio						3.41	
Ratepayer NPV						\$144,698	
Participant Ratio							
Participant NPV						\$5,010	
Societal Ratio						4.64	
Societal NPV						\$201,430	
Narrative							

Program Name: Air Source Heat Pump - C/I
Program Design Manager: Otter Tail Power
Category: Non-Residential Heat Pumps

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)	\$7,168.00	\$10,496.00	\$0.00				
Delivery (2011-present)				\$19,037.00	\$14,225.00	\$10,231.53	
Administration (2011-present)				\$2,320.00	\$1,493.00	\$1,368.87	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00	\$1,634.00	\$347.00	\$487.92	
Advertising & Promotion	\$0.00	\$0.00	\$0.00	\$741.00	\$405.00	\$448.22	
Incentives	\$20,579.00	\$57,280.00	\$0.00	\$77,362.00	\$40,246.00	\$43,082.33	
Other	\$0.00	\$0.00	\$52,642.00	\$0.00	\$0.00		
Total Utility Costs	\$27,747.00	\$67,776.00	\$52,642.00	\$101,094.00	\$56,716.00	\$55,618.87	\$0.00
Program Participants							
Total Participants	40	67	84	193	107	106	
% of Spending by Customer Segments							
Residential	0%	0%	0%	0%	0%	0%	
Commercial	100%	100%	100%	100%	100%	100%	
Industrial	0%	0%	0%	0%	0%		
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter	101,871	171,421	214,916	977,643	438,634	548,113	
Annual kWh Savings @ Generator	101,871	171,421	214,916	977,643	438,634	592,555	
Cost per Annual kWh Saved @ Generator	\$0.2724	\$0.3954	\$0.2449	\$0.1034	\$0.1293	\$0.0939	\$0.0000
Peak kW Savings @ Meter	0.000	25.890	32.460	186.850	84.175	123.210	
Peak kW Savings @ Generator	0.000	25.890	32.460	186.850	84.175	133.200	
Cost per Peak kW Saved @ Generator	\$0.00	\$2,617.84	\$1,621.75	\$541.04	\$673.79	\$417.56	\$0.00
Benefit/Cost Ratios							
Utility Ratio						12.57	
Utility NPV						\$643,788	
Ratepayer Ratio						1.31	
Ratepayer NPV						\$164,921	
Participant Ratio						2.41	
Participant NPV						\$314,901	
Societal Ratio						3.57	
Societal NPV						\$621,713	
Narrative							

Program Name: Air Source Heat Pump - RES
Program Design Manager: Otter Tail Power
Category: Residential Heat Pumps

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)	\$19,098.00	\$42,478.00	\$139,879.00				
Delivery (2011-present)				\$18,833.00	\$29,278.00	\$15,741.74	
Administration (2011-present)				\$2,295.00	\$3,072.00	\$2,106.08	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00	\$1,617.00	\$715.00	\$750.69	
Advertising & Promotion	\$0.00	\$0.00	\$0.00	\$733.00	\$833.00	\$689.61	
Incentives	\$89,455.00	\$72,356.00	\$0.00	\$74,447.00	\$69,840.00	\$66,284.40	
Other	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Total Utility Costs	\$108,553.00	\$114,834.00	\$139,879.00	\$97,925.00	\$103,738.00	\$85,572.52	\$0.00
Program Participants							
Total Participants	202	162	187	125	127	105	
% of Spending by Customer Segments							
Residential	100%	100%	100%	100%	100%	100%	
Commercial	0%	0%	0%	0%	0%		
Industrial	0%	0%	0%	0%	0%		
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Energy Savings							
Annual kWh Savings @ Meter	468,858	372,115	429,540	967,124	902,812	756,998	
Annual kWh Savings @ Generator	468,858	372,115	429,540	967,124	902,812	818,376	
Cost per Annual kWh Saved @ Generator	\$0.2315	\$0.3086	\$0.3256	\$0.1013	\$0.1149	\$0.1046	\$0.0000
Peak kW Savings @ Meter	0.000	69.380	80.090	134.125	125.800	105.247	
Peak kW Savings @ Generator	0.000	69.380	80.090	134.125	125.800	113.781	
Cost per Peak kW Saved @ Generator	\$0.00	\$1,655.15	\$1,746.52	\$730.10	\$824.63	\$752.08	\$0.00
Benefit/Cost Ratios							
Utility Ratio						9.50	
Utility NPV						\$727,693	
Ratepayer Ratio						1.12	
Ratepayer NPV						\$89,187	
Participant Ratio						4.62	
Participant NPV						\$569,665	
Societal Ratio						5.47	
Societal NPV						\$824,631	
Narrative							

Program Name: Appliance Recycling
Program Design Manager: Otter Tail Power
Category: Appliance Harvesting

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)		\$0.00	\$0.00				
Delivery (2011-present)				\$42,212.00	\$56,234.00	\$52,268.13	
Administration (2011-present)				\$7,994.00	\$7,859.00	\$10,535.59	
Evaluation, Measurement & Verification		\$1,165.00	\$0.00	\$753.00	\$1,155.00	\$1,573.48	
Advertising & Promotion		\$12,060.00	\$0.00	\$12,082.00	\$14,425.00	\$20,194.63	
Incentives		\$17,250.00	\$0.00	\$22,000.00	\$27,350.00	\$24,850.00	
Other		\$42,530.00	\$74,657.00	\$0.00	\$0.00		
Total Utility Costs	\$0.00	\$73,005.00	\$74,657.00	\$85,041.00	\$107,023.00	\$109,421.83	\$0.00
Program Participants							
Total Participants		345	368	432	547	497	
% of Spending by Customer Segments							
Residential		100%	100%	100%	100%	100%	
Commercial		0%	0%	0%	0%		
Industrial		0%	0%	0%	0%		
Farm		0%	0%	0%	0%		
Other		0%	0%	0%	0%		
Total % of Spending	0%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)		0.0%	0.0%	0.0%	0.0%	31.0%	
Budget % (% of Total Utility Costs)		0.0%	0.0%	0.0%	0.0%	31.0%	
Energy Savings							
Annual kWh Savings @ Meter		260,506	277,269	328,605	399,548	364,293	
Annual kWh Savings @ Generator		260,506	277,269	328,605	399,548	393,830	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.2802	\$0.2693	\$0.2588	\$0.2679	\$0.2778	\$0.0000
Peak kW Savings @ Meter		48.570	51.690	45.325	55.500	50.644	
Peak kW Savings @ Generator		48.570	51.690	45.325	55.500	54.750	
Cost per Peak kW Saved @ Generator	\$0.00	\$1,503.09	\$1,444.32	\$1,876.25	\$1,928.34	\$1,998.56	\$0.00
Benefit/Cost Ratios							
Utility Ratio						2.28	
Utility NPV						\$139,608	
Ratepayer Ratio						0.80	
Ratepayer NPV						(\$60,871)	
Participant Ratio							
Participant NPV						\$234,780	
Societal Ratio						3.39	
Societal NPV						\$201,818	
Narrative							

Program Name: Business Education
Program Design Manager: Otter Tail Power
Category: Other - Direct

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Inactive	Inactive	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)							
Delivery (2011-present)				\$0.00	\$892.00	\$90.67	
Administration (2011-present)				\$1,317.00	\$3,440.00	\$3,517.45	
Evaluation, Measurement & Verification				\$2,135.00	\$1,431.00	\$4,511.85	
Advertising & Promotion				\$0.00	\$906.00		
Incentives				\$0.00	\$2,400.00	\$600.00	
Other				\$0.00	\$0.00		
Total Utility Costs	\$0.00	\$0.00	\$0.00	\$3,452.00	\$9,069.00	\$8,719.97	\$0.00
Program Participants							
Total Participants				5	6	3	
% of Spending by Customer Segments							
Residential				0%	0%		
Commercial				90%	90%	90%	
Industrial				10%	10%	10%	
Farm				0%	0%		
Other				0%	0%		
Total % of Spending	0%	0%	0%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)				0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)				0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter				66,240	246,108	271,116	
Annual kWh Savings @ Generator				66,240	246,108	293,098	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0521	\$0.0368	\$0.0298	\$0.0000
Peak kW Savings @ Meter				12.950	30.525	33.513	
Peak kW Savings @ Generator				12.950	30.525	36.230	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$266.56	\$297.10	\$240.68	\$0.00
Benefit/Cost Ratios							
Utility Ratio						2.76	
Utility NPV						\$15,324	
Ratepayer Ratio						0.81	
Ratepayer NPV						(\$5,516)	
Participant Ratio							
Participant NPV						\$22,422	
Societal Ratio						3.08	
Societal NPV						\$16,906	
Narrative							

Program Name: Campus Energy Challenge Pilot - C/I
Program Design Manager: Otter Tail Power
Category: Specialty Non-Residential

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Active	Active	Inactive	Inactive	Inactive	Inactive
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)		\$0.00	\$0.00				
Delivery (2011-present)							
Administration (2011-present)							
Evaluation, Measurement & Verification		\$0.00	\$0.00				
Advertising & Promotion		\$0.00	\$0.00				
Incentives		\$0.00	\$0.00				
Other		\$54,180.00	\$169,821.00				
Total Utility Costs	\$0.00	\$54,180.00	\$169,821.00	\$0.00	\$0.00	\$0.00	\$0.00
Program Participants							
Total Participants		0	4				
% of Spending by Customer Segments							
Residential		0%	0%				
Commercial		100%	100%				
Industrial		0%	0%				
Farm		0%	0%				
Other		0%	0%				
Total % of Spending	0%	100%	100%	0%	0%	0%	0%
Low-Income Participation							
Participant % (% of Total Participants)		0.0%	0.0%				
Budget % (% of Total Utility Costs)		0.0%	0.0%				
Energy Savings							
Annual kWh Savings @ Meter		0	1,234,698				
Annual kWh Savings @ Generator		0	1,234,698				
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.1375	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter		0.000	152.200				
Peak kW Savings @ Generator		0.000	152.200				
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$1,115.78	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV							
Ratepayer Ratio							
Ratepayer NPV							
Participant Ratio							
Participant NPV							
Societal Ratio							
Societal NPV							
Narrative							

Program Name: Change A Light
Program Design Manager: Otter Tail Power
Category: Residential Lighting

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)	\$0.00	\$0.00	\$0.00				
Delivery (2011-present)				\$23,283.00	\$29,786.00	\$34,438.63	
Administration (2011-present)				\$8,126.00	\$10,029.00	\$13,098.45	
Evaluation, Measurement & Verification	\$0.00	\$1,023.00	\$0.00	\$262.00	\$3,890.00	\$1,948.46	
Advertising & Promotion	\$0.00	\$6,936.00	\$0.00	\$7,127.00	\$1,657.00	\$2,043.33	
Incentives	\$35,102.00	\$28,822.00	\$0.00	\$25,015.00	\$29,235.00	\$48,031.42	
Other	\$43,493.00	\$32,120.00	\$73,897.00	\$0.00	\$0.00		
Total Utility Costs	\$78,595.00	\$68,901.00	\$73,897.00	\$63,813.00	\$74,597.00	\$99,560.29	\$0.00
Program Participants							
Total Participants	19,143	22,770	16,329	28,029	28,034	37,212	
% of Spending by Customer Segments							
Residential	100%	100%	100%	100%	100%	100%	
Commercial	0%	0%	0%	0%	0%		
Industrial	0%	0%	0%	0%	0%		
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Energy Savings							
Annual kWh Savings @ Meter	1,327,606	1,266,151	965,633	1,516,159	1,595,816	2,119,259	
Annual kWh Savings @ Generator	1,327,606	1,266,151	965,633	1,516,159	1,595,816	2,291,091	
Cost per Annual kWh Saved @ Generator	\$0.0592	\$0.0544	\$0.0765	\$0.0421	\$0.0467	\$0.0435	\$0.0000
Peak kW Savings @ Meter	186.000	236.000	181.000	211.825	222.000	294.622	
Peak kW Savings @ Generator	186.000	236.000	181.000	211.825	222.000	318.510	
Cost per Peak kW Saved @ Generator	\$422.55	\$291.95	\$408.27	\$301.25	\$336.02	\$312.58	\$0.00
Benefit/Cost Ratios							
Utility Ratio						18.14	
Utility NPV						\$1,706,169	
Ratepayer Ratio						1.18	
Ratepayer NPV						\$272,990	
Participant Ratio						13.83	
Participant NPV						\$1,436,752	
Societal Ratio						13.10	
Societal NPV						\$1,978,659	
Narrative							

Program Name: CIP Development
Program Design Manager: Otter Tail Power
Category: Market Research and Product Development

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						0.000%	
kW Line Loss Factor						0.000%	
Utility Cost Components							
Delivery and Administration (2008-2010)	\$0.00	\$249,416.00	\$0.00				
Delivery (2011-present)				\$226,837.00	\$214,811.00	\$26,568.61	
Administration (2011-present)				\$93,028.00	\$314,282.00	\$394,790.66	
Evaluation, Measurement & Verification	\$0.00	\$18,007.00	\$0.00	\$25,449.00	\$38,137.00	\$58,456.70	
Advertising & Promotion	\$0.00	\$744.00	\$0.00	\$737.00	\$1,160.00	\$4,081.63	
Incentives	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Other	\$137,566.00	\$2,873.00	\$458,048.00	\$0.00	\$35.00	\$41.89	
Total Utility Costs	\$137,566.00	\$271,040.00	\$458,048.00	\$346,051.00	\$568,425.00	\$483,939.49	\$0.00
Program Participants							
Total Participants	0	0	0	0	0	0	
% of Spending by Customer Segments							
Residential	0%	0%	0%	0%	0%		
Commercial	0%	0%	0%	0%	0%		
Industrial	0%	0%	0%	0%	0%		
Farm	0%	0%	0%	0%	0%		
Other	100%	100%	100%	100%	100%	100%	
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter	0	0	0	0	0	0	
Annual kWh Savings @ Generator	0	0	0	0	0	0	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter	0.000	0.000	0.000	0.000	0.000	0.000	
Peak kW Savings @ Generator	0.000	0.000	0.000	0.000	0.000	0.000	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV						(\$483,939)	
Ratepayer Ratio							
Ratepayer NPV						(\$483,939)	
Participant Ratio							
Participant NPV						\$0	
Societal Ratio							
Societal NPV							
Narrative							

Program Name: Commercial Design Assistance
Program Design Manager: Otter Tail Power
Category: Non-Residential Whole Building - Non-Process Related

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Inactive	Inactive	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)							
Delivery (2011-present)				\$58,601.00	\$112,893.00	\$127,461.94	
Administration (2011-present)				\$11,820.00	\$8,020.00	\$54,622.57	
Evaluation, Measurement & Verification				\$0.00	\$330.00	\$12,628.65	
Advertising & Promotion				\$1,945.00	\$571.00	\$1,314.91	
Incentives				\$0.00	\$0.00	\$92,113.17	
Other				\$0.00		\$0.00	
Total Utility Costs	\$0.00	\$0.00	\$0.00	\$72,366.00	\$121,814.00	\$288,141.24	\$0.00
Program Participants							
Total Participants				0	0	6	
% of Spending by Customer Segments							
Residential				0%	0%		
Commercial				100%	100%	100%	
Industrial				0%	0%		
Farm				0%	0%		
Other				0%	0%		
Total % of Spending	0%	0%	0%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)				0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)				0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter				0	0	1,442,557	
Annual kWh Savings @ Generator				0	0	1,559,521	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.1848	\$0.0000
Peak kW Savings @ Meter				0.000	0.000	275.382	
Peak kW Savings @ Generator				0.000	0.000	297.710	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$967.86	\$0.00
Benefit/Cost Ratios							
Utility Ratio						7.02	
Utility NPV						\$1,735,265	
Ratepayer Ratio						1.47	
Ratepayer NPV						\$647,844	
Participant Ratio							
Participant NPV						\$1,230,796	
Societal Ratio						13.20	
Societal NPV						\$2,391,890	
Narrative							

Program Name: Company CIP Projects
Program Design Manager: Otter Tail Power
Category: Other - Indirect

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Inactive	Inactive	Inactive	Inactive	Active	Active
Utility Metrics							
kWh Line Loss Factor						0.000%	
kW Line Loss Factor						0.000%	
Utility Cost Components							
Delivery and Administration (2008-2010)							
Delivery (2011-present)						\$76.09	
Administration (2011-present)						\$1,579.49	
Evaluation, Measurement & Verification							
Advertising & Promotion							
Incentives						\$710.00	
Other							
Total Utility Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,365.58	\$0.00
Program Participants							
Total Participants							
% of Spending by Customer Segments							
Residential						0%	
Commercial						0%	
Industrial						0%	
Farm						0%	
Other						100%	
Total % of Spending	0%	0%	0%	0%	0%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)						0.0%	
Budget % (% of Total Utility Costs)						0.0%	
Energy Savings							
Annual kWh Savings @ Meter						0	
Annual kWh Savings @ Generator						0	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter						0.000	
Peak kW Savings @ Generator						0.000	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV						(\$2,366)	
Ratepayer Ratio							
Ratepayer NPV						(\$2,366)	
Participant Ratio							
Participant NPV						\$0	
Societal Ratio							
Societal NPV							
Narrative							

Program Name: Compressed Air Audits - C/I
Program Design Manager: Otter Tail Power
Category: Compressed Air

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						0.000%	
kW Line Loss Factor						0.000%	
Utility Cost Components							
Delivery and Administration (2008-2010)		\$1,002.00	\$0.00				
Delivery (2011-present)				\$226.00	\$92.00	\$2,405.59	
Administration (2011-present)				\$0.00	\$530.00		
Evaluation, Measurement & Verification		\$204.00	\$0.00	\$0.00	\$99.00		
Advertising & Promotion		\$18.00	\$0.00	\$0.00	\$0.00		
Incentives		\$0.00	\$0.00	\$6,680.00	\$0.00	\$9,600.00	
Other		\$0.00	\$9,853.00	\$0.00	\$0.00		
Total Utility Costs	\$0.00	\$1,224.00	\$9,853.00	\$6,906.00	\$721.00	\$12,005.59	\$0.00
Program Participants							
Total Participants		0	1	1	0	2	
% of Spending by Customer Segments							
Residential		0%	0%	0%	0%		
Commercial		90%	90%	90%	90%	90%	
Industrial		10%	10%	10%	10%	10%	
Farm		0%	0%	0%	0%		
Other		0%	0%	0%	0%		
Total % of Spending	0%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)		0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)		0.0%	0.0%	0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter		0	0	0	0	0	
Annual kWh Savings @ Generator		0	0	0	0	0	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter		0.000	0.000	0.000	0.000	0.000	
Peak kW Savings @ Generator		0.000	0.000	0.000	0.000	0.000	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV						(\$12,006)	
Ratepayer Ratio							
Ratepayer NPV						(\$12,006)	
Participant Ratio							
Participant NPV						\$0	
Societal Ratio							
Societal NPV							
Narrative							

Program Name: Cooking
Program Design Manager: Otter Tail Power
Category: Food Service

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Inactive	Inactive	Inactive	Inactive
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)	\$13,452.00	\$5,729.00	\$0.00				
Delivery (2011-present)							
Administration (2011-present)							
Evaluation, Measurement & Verification	\$0.00	\$612.00	\$0.00				
Advertising & Promotion	\$0.00	\$2,054.00	\$0.00				
Incentives	\$600.00	\$21,300.00	\$0.00				
Other	\$0.00	\$0.00	\$35,716.00				
Total Utility Costs	\$14,052.00	\$29,695.00	\$35,716.00	\$0.00	\$0.00	\$0.00	\$0.00
Program Participants							
Total Participants	2	3	12				
% of Spending by Customer Segments							
Residential	0%	0%	0%				
Commercial	90%	90%	90%				
Industrial	10%	10%	10%				
Farm	0%	0%	0%				
Other	0%	0%	0%				
Total % of Spending	100%	100%	100%	0%	0%	0%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%				
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%				
Energy Savings							
Annual kWh Savings @ Meter	27,223	24,148	99,292				
Annual kWh Savings @ Generator	27,223	24,148	99,292				
Cost per Annual kWh Saved @ Generator	\$0.5162	\$1.2297	\$0.3597	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter	6.320	3.640	14.990				
Peak kW Savings @ Generator	6.320	3.640	14.990				
Cost per Peak kW Saved @ Generator	\$2,223.42	\$8,157.97	\$2,382.66	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV							
Ratepayer Ratio							
Ratepayer NPV							
Participant Ratio							
Participant NPV							
Societal Ratio							
Societal NPV							
Narrative							

Program Name: Distributed Generation - General
Program Design Manager: Otter Tail Power
Category: Distributed and Renewable Energy

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)	\$487.00						
Delivery (2011-present)		\$0.00	\$0.00				
Administration (2011-present)		\$0.00	\$0.00				
Evaluation, Measurement & Verification	\$0.00						
Advertising & Promotion	\$0.00						
Incentives	\$0.00						
Other	\$0.00						
Total Utility Costs	\$487.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Program Participants							
Total Participants	0						
% of Spending by Customer Segments							
Residential	0%						
Commercial	0%						
Industrial	0%						
Farm	0%						
Other	100%						
Total % of Spending	100%	0%	0%	0%	0%	0%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%				
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%				
Energy Savings							
Annual kWh Savings @ Meter	0						
Annual kWh Savings @ Generator	0						
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter	0.000						
Peak kW Savings @ Generator	0.000						
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV							
Ratepayer Ratio							
Ratepayer NPV							
Participant Ratio							
Participant NPV							
Societal Ratio							
Societal NPV							
Narrative							

Program Name: Energy Analysis & Recommendation - C/I
Program Design Manager: Otter Tail Power
Category: Non-Residential Building Energy Audits / Analysis

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)	\$96,474.00						
Delivery (2011-present)							
Administration (2011-present)							
Evaluation, Measurement & Verification	\$5,422.00						
Advertising & Promotion	\$0.00						
Incentives	\$0.00						
Other	\$0.00						
Total Utility Costs	\$101,896.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Program Participants							
Total Participants	53						
% of Spending by Customer Segments							
Residential	0%						
Commercial	90%						
Industrial	10%						
Farm	0%						
Other	0%						
Total % of Spending	100%	0%	0%	0%	0%	0%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%						
Budget % (% of Total Utility Costs)	0.0%						
Energy Savings							
Annual kWh Savings @ Meter	0						
Annual kWh Savings @ Generator	0						
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter	0.000						
Peak kW Savings @ Generator	0.000						
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV							
Ratepayer Ratio							
Ratepayer NPV							
Participant Ratio							
Participant NPV							
Societal Ratio							
Societal NPV							
Narrative							

Program Name: Energy Feedback Program
Program Design Manager: Otter Tail Power
Category: Residential Behavioral Change

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Inactive	Inactive	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)							
Delivery (2011-present)				\$403,046.00	\$304,311.00	\$37,499.09	
Administration (2011-present)				\$12,331.00	\$10,359.00	\$11,687.25	
Evaluation, Measurement & Verification				\$10,868.00	\$7,349.00	\$9,709.46	
Advertising & Promotion				\$2,714.00	\$0.00	\$6,195.70	
Incentives				\$0.00	\$0.00	\$290,009.76	
Other				\$0.00	\$0.00		
Total Utility Costs	\$0.00	\$0.00	\$0.00	\$428,959.00	\$322,019.00	\$355,101.26	\$0.00
Program Participants							
Total Participants				31,496	32,494	36,203	
% of Spending by Customer Segments							
Residential				100%	100%	100%	
Commercial				0%	0%		
Industrial				0%	0%		
Farm				0%	0%		
Other				0%	0%		
Total % of Spending	0%	0%	0%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)				0.0%	0.0%	31.0%	
Budget % (% of Total Utility Costs)				0.0%	0.0%	31.0%	
Energy Savings							
Annual kWh Savings @ Meter				2,936,044	5,196,138	2,216,365	
Annual kWh Savings @ Generator				2,936,044	5,196,138	2,396,070	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.1461	\$0.0620	\$0.1482	\$0.0000
Peak kW Savings @ Meter				592.000	1,048.000	1,341.047	
Peak kW Savings @ Generator				592.000	1,048.000	1,449.781	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$724.59	\$307.27	\$244.93	\$0.00
Benefit/Cost Ratios							
Utility Ratio						2.05	
Utility NPV						\$374,115	
Ratepayer Ratio						0.75	
Ratepayer NPV						(\$238,721)	
Participant Ratio							
Participant NPV						\$641,725	
Societal Ratio						2.13	
Societal NPV						\$403,004	
Narrative							

Program Name: EZ Lights- C/I
Program Design Manager: Otter Tail Power
Category: Non-Residential Lighting

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Inactive	Inactive	Inactive	Inactive	Inactive
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)	\$92,381.00	\$8,675.00					
Delivery (2011-present)							
Administration (2011-present)							
Evaluation, Measurement & Verification	\$0.00	\$0.00					
Advertising & Promotion	\$0.00	\$0.00					
Incentives	\$31,940.00	\$3,529.00					
Other	\$0.00	\$0.00					
Total Utility Costs	\$124,321.00	\$12,204.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Program Participants							
Total Participants	13	1					
% of Spending by Customer Segments							
Residential	0%	0%					
Commercial	100%	100%					
Industrial	0%	0%					
Farm	0%	0%					
Other	0%	0%					
Total % of Spending	100%	100%	0%	0%	0%	0%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%				
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%				
Energy Savings							
Annual kWh Savings @ Meter	177,416	8,112					
Annual kWh Savings @ Generator	177,416	8,112					
Cost per Annual kWh Saved @ Generator	\$0.7007	\$1.5044	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter	84.440	1.220					
Peak kW Savings @ Generator	84.440	1.220					
Cost per Peak kW Saved @ Generator	\$1,472.30	\$10,003.28	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV							
Ratepayer Ratio							
Ratepayer NPV							
Participant Ratio							
Participant NPV							
Societal Ratio							
Societal NPV							
Narrative							

Program Name: Financing - C/I
Program Design Manager: Otter Tail Power
Category: Other - Indirect

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Inactive	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						0.000%	
kW Line Loss Factor						0.000%	
Utility Cost Components							
Delivery and Administration (2008-2010)	\$0.00	\$0.00	\$0.00				
Delivery (2011-present)	\$0.00	\$0.00	\$0.00	\$9,725.00	\$1,823.00	\$412.83	
Administration (2011-present)	\$0.00	\$0.00	\$0.00	\$2,938.00	\$1,912.00	\$1,878.86	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00	\$808.00	\$308.00	\$87.20	
Advertising & Promotion	\$0.00	\$0.00	\$0.00	\$3,117.00	\$943.00	\$1,622.77	
Incentives	\$0.00	\$0.00	\$0.00	\$0.00	\$3,950.00	\$2,814.84	
Other	\$3,893.00	\$0.00	\$12,508.00	\$1,607.00	\$0.00		
Total Utility Costs	\$3,893.00	\$0.00	\$12,508.00	\$18,195.00	\$8,936.00	\$6,816.50	\$0.00
Program Participants							
Total Participants	1	0	1	3	0	0	
% of Spending by Customer Segments							
Residential	0%	0%	0%	0%	0%		
Commercial	100%	100%	100%	90%	90%	90%	
Industrial	0%	0%	0%	10%	10%	10%	
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%		
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%		
Energy Savings							
Annual kWh Savings @ Meter	0	0	0	0	0	0	
Annual kWh Savings @ Generator	0	0	0	0	0	0	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter	0.000	0.000	0.000	0.000	0.000	0.000	
Peak kW Savings @ Generator	0.000	0.000	0.000	0.000	0.000	0.000	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV						(\$6,816)	
Ratepayer Ratio							
Ratepayer NPV						(\$6,816)	
Participant Ratio							
Participant NPV						\$0	
Societal Ratio							
Societal NPV							
Narrative							

Program Name: Financing - Res
Program Design Manager: Otter Tail Power
Category: Other - Indirect

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						0.000%	
kW Line Loss Factor						0.000%	
Utility Cost Components							
Delivery and Administration (2008-2010)	\$35,034.00	\$0.00	\$0.00				
Delivery (2011-present)				\$1,746.00	\$1,823.00	\$412.83	
Administration (2011-present)				\$527.00	\$1,912.00	\$1,878.86	
Evaluation, Measurement & Verification	\$0.00	\$1,811.00	\$0.00	\$145.00	\$308.00	\$87.20	
Advertising & Promotion	\$0.00	\$3,241.00	\$0.00	\$559.00	\$943.00	\$1,622.77	
Incentives	\$0.00	\$0.00	\$0.00	\$0.00	\$3,950.00	\$2,814.84	
Other	\$0.00	\$27,669.00	\$12,508.00	\$288.00	\$0.00		
Total Utility Costs	\$35,034.00	\$32,721.00	\$12,508.00	\$3,265.00	\$8,936.00	\$6,816.50	\$0.00
Program Participants							
Total Participants	9	4	2	4	0	1	
% of Spending by Customer Segments							
Residential	100%	100%	100%	100%	100%		
Commercial	0%	0%	0%	0%	0%		
Industrial	0%	0%	0%	0%	0%		
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	0%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Energy Savings							
Annual kWh Savings @ Meter	0	0	0	0	0	0	
Annual kWh Savings @ Generator	0	0	0	0	0	0	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter	0.000	0.000	0.000	0.000	0.000	0.000	
Peak kW Savings @ Generator	0.000	0.000	0.000	0.000	0.000	0.000	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV						(\$6,816)	
Ratepayer Ratio							
Ratepayer NPV						(\$6,816)	
Participant Ratio							
Participant NPV						\$0	
Societal Ratio							
Societal NPV							
Narrative							

Program Name: Geothermal Heat Pump - C/I
Program Design Manager: Otter Tail Power
Category: Non-Residential Heat Pumps

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)	\$4,121.00	\$28,825.00	\$0.00				
Delivery (2011-present)				\$21,505.00	\$13,517.00	\$30,885.94	
Administration (2011-present)				\$2,621.00	\$1,418.00	\$4,132.22	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00	\$1,846.00	\$330.00	\$1,472.87	
Advertising & Promotion	\$0.00	\$0.00	\$0.00	\$837.00	\$385.00	\$1,353.05	
Incentives	\$34,727.00	\$405,710.00	\$0.00	\$196,085.00	\$74,004.00	\$130,052.72	
Other	\$0.00	\$0.00	\$418,342.00	\$0.00	\$0.00		
Total Utility Costs	\$38,848.00	\$434,535.00	\$418,342.00	\$222,894.00	\$89,654.00	\$167,896.80	\$0.00
Program Participants							
Total Participants	23	184	210	54	25	18	
% of Spending by Customer Segments							
Residential	0%	0%	0%	0%	0%	0%	
Commercial	90%	90%	90%	100%	100%	100%	
Industrial	10%	10%	10%	0%	0%		
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter	299,252	2,387,693	1,958,335	1,104,388	416,805	787,382	
Annual kWh Savings @ Generator	299,252	2,387,693	1,958,335	1,104,388	416,805	851,224	
Cost per Annual kWh Saved @ Generator	\$0.1298	\$0.1820	\$0.2136	\$0.2018	\$0.2151	\$0.1972	\$0.0000
Peak kW Savings @ Meter	206.870	1,598.020	295.800	794.575	299.700	176.999	
Peak kW Savings @ Generator	206.870	1,598.020	295.800	794.575	299.700	191.350	
Cost per Peak kW Saved @ Generator	\$187.79	\$271.92	\$1,414.27	\$280.52	\$299.15	\$877.43	\$0.00
Benefit/Cost Ratios							
Utility Ratio						6.99	
Utility NPV						\$1,006,387	
Ratepayer Ratio						0.84	
Ratepayer NPV						(\$220,301)	
Participant Ratio						6.44	
Participant NPV						\$1,203,274	
Societal Ratio						6.17	
Societal NPV						\$1,287,904	
Narrative							

Program Name: Geothermal Heat Pump -RES
Program Design Manager: Otter Tail Power
Category: Residential Heat Pumps

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)	\$6,272.00	\$5,640.00	\$147,770.00				
Delivery (2011-present)				\$12,240.00	\$19,677.00	\$13,346.99	
Administration (2011-present)				\$1,492.00	\$2,065.00	\$1,785.69	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00	\$1,051.00	\$480.00	\$636.49	
Advertising & Promotion	\$0.00	\$0.00	\$0.00	\$477.00	\$560.00	\$584.70	
Incentives	\$29,241.00	\$79,523.00	\$0.00	\$120,896.00	\$116,700.00	\$56,200.71	
Other	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Total Utility Costs	\$35,513.00	\$85,163.00	\$147,770.00	\$136,156.00	\$139,482.00	\$72,554.58	\$0.00
Program Participants							
Total Participants	35	36	56	44	37	22	
% of Spending by Customer Segments							
Residential	100%	100%	100%	100%	100%	100%	
Commercial	0%	0%	0%	0%	0%		
Industrial	0%	0%	0%	0%	0%		
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Energy Savings							
Annual kWh Savings @ Meter	391,426	400,932	623,672	628,579	606,764	318,200	
Annual kWh Savings @ Generator	391,426	400,932	623,672	628,579	606,764	344,000	
Cost per Annual kWh Saved @ Generator	\$0.0907	\$0.2124	\$0.2369	\$0.2166	\$0.2299	\$0.2109	\$0.0000
Peak kW Savings @ Meter	282.750	286.380	445.480	482.850	466.200	244.357	
Peak kW Savings @ Generator	282.750	286.380	445.480	482.850	466.200	264.170	
Cost per Peak kW Saved @ Generator	\$125.60	\$297.38	\$331.71	\$281.98	\$299.19	\$274.65	\$0.00
Benefit/Cost Ratios							
Utility Ratio						8.34	
Utility NPV						\$532,462	
Ratepayer Ratio						1.56	
Ratepayer NPV						\$217,834	
Participant Ratio						1.51	
Participant NPV						\$132,160	
Societal Ratio						2.86	
Societal NPV						\$502,865	
Narrative							

Program Name: Grants
Program Design Manager: Otter Tail Power
Category: Non-Residential Custom Efficiency

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)	\$78,300.00	\$150,151.00	\$0.00				
Delivery (2011-present)				\$172,328.00	\$241,417.00	\$159,596.60	
Administration (2011-present)				\$13,070.00	\$16,978.00	\$46,914.42	
Evaluation, Measurement & Verification	\$0.00	\$19,775.00	\$0.00	\$24,318.00	\$30,062.00	\$13,772.84	
Advertising & Promotion	\$0.00	\$6,164.00	\$0.00	\$5,503.00	\$4,455.00	\$4,611.46	
Incentives	\$530,475.00	\$1,066,284.00	\$0.00	\$216,216.00	\$507,554.00	\$440,729.00	
Other	\$0.00	\$0.00	\$358,087.00	\$0.00	\$0.00	\$0.00	
Total Utility Costs	\$608,775.00	\$1,242,374.00	\$358,087.00	\$431,435.00	\$800,466.00	\$665,624.32	\$0.00
Program Participants							
Total Participants	45	23	24	46	58	51	
% of Spending by Customer Segments							
Residential	0%	0%	0%	0%	0%		
Commercial	10%	10%	10%	10%	10%	10%	
Industrial	90%	90%	90%	90%	90%	90%	
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter	7,088,265	19,391,620	2,480,706	1,532,686	4,140,223	5,566,628	
Annual kWh Savings @ Generator	7,088,265	19,391,620	2,480,706	1,532,686	4,140,223	6,017,976	
Cost per Annual kWh Saved @ Generator	\$0.0859	\$0.0641	\$0.1443	\$0.2815	\$0.1933	\$0.1106	\$0.0000
Peak kW Savings @ Meter	1,174.230	3,188.200	517.690	561.475	850.075	1,219.724	
Peak kW Savings @ Generator	1,174.230	3,188.200	517.690	561.475	850.075	1,318.621	
Cost per Peak kW Saved @ Generator	\$518.45	\$389.68	\$691.70	\$768.40	\$941.64	\$504.79	\$0.00
Benefit/Cost Ratios							
Utility Ratio						11.69	
Utility NPV						\$7,113,027	
Ratepayer Ratio						1.54	
Ratepayer NPV						\$2,732,063	
Participant Ratio						2.47	
Participant NPV						\$2,866,683	
Societal Ratio						4.85	
Societal NPV						\$8,389,757	
Narrative							

Program Name: Home Insulation
Program Design Manager: Otter Tail Power
Category: Residential Building Envelope

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Inactive	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)			\$11,055.00				
Delivery (2011-present)				\$1,240.00	(\$532.00)	\$1,879.31	
Administration (2011-present)				\$7,214.00	\$6,731.00	\$6,181.53	
Evaluation, Measurement & Verification			\$0.00	\$456.00	\$541.00	\$1,117.93	
Advertising & Promotion			\$0.00	\$5,437.00	\$4,938.00	\$1,631.74	
Incentives			\$0.00	\$4,263.00	\$4,643.00	\$3,860.32	
Other			\$0.00	\$0.00	\$0.00		
Total Utility Costs	\$0.00	\$0.00	\$11,055.00	\$18,610.00	\$16,321.00	\$14,670.83	\$0.00
Program Participants							
Total Participants			9	20	23	18	
% of Spending by Customer Segments							
Residential			100%	100%	100%	100%	
Commercial			0%	0%	0%		
Industrial			0%	0%	0%		
Farm			0%	0%	0%		
Other			0%	0%	0%		
Total % of Spending	0%	0%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)			0.0%	0.0%	0.0%	31.0%	
Budget % (% of Total Utility Costs)			0.0%	0.0%	0.0%	31.0%	
Energy Savings							
Annual kWh Savings @ Meter			35,798	79,550	81,789	43,915	
Annual kWh Savings @ Generator			35,798	79,550	81,789	47,476	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.3088	\$0.2339	\$0.1996	\$0.3090	\$0.0000
Peak kW Savings @ Meter			6.475	11.100	11.100	6.105	
Peak kW Savings @ Generator			6.475	11.100	11.100	6.600	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$1,707.34	\$1,676.58	\$1,470.36	\$2,222.85	\$0.00
Benefit/Cost Ratios							
Utility Ratio						3.76	
Utility NPV						\$40,461	
Ratepayer Ratio						0.58	
Ratepayer NPV						(\$40,454)	
Participant Ratio						2.57	
Participant NPV						\$54,090	
Societal Ratio						1.62	
Societal NPV						\$28,218	
Narrative							

Program Name: Hot Packs
Program Design Manager: Otter Tail Power
Category: Residential Domestic Hot Water

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Inactive	Inactive	Inactive
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)	\$7,973.00	\$6,923.00	\$0.00				
Delivery (2011-present)				\$1,542.00	\$0.00		
Administration (2011-present)				\$265.00	\$0.00		
Evaluation, Measurement & Verification	\$0.00	\$547.00	\$0.00	\$303.00	\$0.00		
Advertising & Promotion	\$0.00	\$347.00	\$0.00	\$0.00	\$0.00		
Incentives	\$5,569.00	\$3,623.00	\$0.00	\$554.00	\$0.00		
Other	\$0.00	\$0.00	\$11,286.00	\$0.00	\$0.00		
Total Utility Costs	\$13,542.00	\$11,440.00	\$11,286.00	\$2,664.00	\$0.00	\$0.00	\$0.00
Program Participants							
Total Participants	315	169	182	12	0		
% of Spending by Customer Segments							
Residential	100%	100%	100%	0%	0%		
Commercial	0%	0%	0%	100%	100%		
Industrial	0%	0%	0%	0%	0%		
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	0%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%		
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%		
Energy Savings							
Annual kWh Savings @ Meter	208,474	121,331	130,665	8,615	0		
Annual kWh Savings @ Generator	208,474	121,331	130,665	8,615	0		
Cost per Annual kWh Saved @ Generator	\$0.0650	\$0.0943	\$0.0864	\$0.3092	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter	42.780	22.200	24.360	0.925	0.000		
Peak kW Savings @ Generator	42.780	22.200	24.360	0.925	0.000		
Cost per Peak kW Saved @ Generator	\$316.55	\$515.32	\$463.30	\$2,880.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV							
Ratepayer Ratio							
Ratepayer NPV							
Participant Ratio							
Participant NPV							
Societal Ratio							
Societal NPV							
Narrative							

Program Name: House Therapy
Program Design Manager: Otter Tail Power
Category: Low Income Weatherization

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)	\$0.00	\$163,814.00	\$0.00				
Delivery (2011-present)				\$134,591.00	\$118,286.00	\$121,787.74	
Administration (2011-present)				\$8,748.00	\$11,457.00	\$14,598.26	
Evaluation, Measurement & Verification	\$0.00	\$1,712.00	\$0.00	\$1,485.00	\$2,060.00	\$3,822.82	
Advertising & Promotion	\$0.00	\$1,445.00	\$0.00	\$2,331.00	\$1,858.00	\$1,805.07	
Incentives	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Other	\$196,955.00	\$1,055.00	\$173,425.00	\$0.00	\$1,043.00	\$39.96	
Total Utility Costs	\$196,955.00	\$168,026.00	\$173,425.00	\$147,155.00	\$134,704.00	\$142,053.85	\$0.00
Program Participants							
Total Participants	230	175	251	222	148	129	
% of Spending by Customer Segments							
Residential	100%	100%	100%	100%	100%	100%	
Commercial	0%	0%	0%	0%	0%		
Industrial	0%	0%	0%	0%	0%		
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Budget % (% of Total Utility Costs)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Energy Savings							
Annual kWh Savings @ Meter	380,141	381,379	499,628	493,368	336,439	284,818	
Annual kWh Savings @ Generator	380,141	381,379	499,628	493,368	336,439	307,911	
Cost per Annual kWh Saved @ Generator	\$0.5181	\$0.4406	\$0.3471	\$0.2983	\$0.4004	\$0.4613	\$0.0000
Peak kW Savings @ Meter	61.220	85.200	115.400	83.250	64.750	49.867	
Peak kW Savings @ Generator	61.220	85.200	115.400	83.250	64.750	53.910	
Cost per Peak kW Saved @ Generator	\$3,217.17	\$1,972.14	\$1,502.82	\$1,767.63	\$2,080.37	\$2,635.01	\$0.00
Delivered Fuel Savings							
Gallons of #2 Fuel Oil						0	0
Gallons of LPG						0	0
Dekatherms Natural Gas						0.0	0.0
Total Savings (Derived)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Energy Savings	380,141.0	381,379.0	499,628.0	493,368.0	336,439.0	307,911.4	0.0
Benefit/Cost Ratios							
Utility Ratio						1.78	
Utility NPV						\$110,247	
Ratepayer Ratio						0.75	
Ratepayer NPV						(\$81,926)	
Participant Ratio							
Participant NPV						\$312,528	
Societal Ratio						9.79	
Societal NPV						\$270,269	
Narrative							

Program Name: Implementation & Training - C/I
Program Design Manager: Otter Tail Power
Category: Internal Training

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)	\$0.00	\$42,378.00	\$0.00				
Delivery (2011-present)				\$50,285.00	\$48,976.00	\$11,112.41	
Administration (2011-present)				\$6,304.00	\$8,182.00	\$30,462.83	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00	\$1,894.00	\$1,971.00	(\$106.99)	
Advertising & Promotion	\$0.00	\$0.00	\$0.00	\$0.00	\$1,834.00	\$915.06	
Incentives	\$0.00	\$14,400.00	\$0.00	\$0.00	\$0.00		
Other	\$65,012.00	\$0.00	\$94,805.00	\$155.00	\$39.00	\$33.26	
Total Utility Costs	\$65,012.00	\$56,778.00	\$94,805.00	\$58,638.00	\$61,002.00	\$42,416.57	\$0.00
Program Participants							
Total Participants	165	186	267	245	314	359	
% of Spending by Customer Segments							
Residential	0%	0%	0%	0%	0%	0%	
Commercial	90%	90%	90%	90%	90%	90%	
Industrial	10%	10%	10%	10%	10%	10%	
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter	0	231,371	154,247	1	1	0	
Annual kWh Savings @ Generator	0	231,371	154,247	1	1	0	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.2454	\$0.6146	\$58,638.0000	\$61,002.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter	0.000	37.780	25.190	1.000	1.000	0.000	
Peak kW Savings @ Generator	0.000	37.780	25.190	1.000	1.000	0.000	
Cost per Peak kW Saved @ Generator	\$0.00	\$1,502.86	\$3,763.60	\$58,638.00	\$61,002.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV						(\$42,417)	
Ratepayer Ratio							
Ratepayer NPV						(\$42,417)	
Participant Ratio							
Participant NPV						\$0	
Societal Ratio							
Societal NPV						(\$42,417)	
Narrative							

Program Name: Implementation & Training - RES
Program Design Manager: Otter Tail Power
Category: Other - Indirect

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)	\$0.00	\$0.00	\$0.00				
Delivery (2011-present)				\$38,093.00	\$39,321.00	\$9,180.33	
Administration (2011-present)				\$4,756.00	\$6,569.00	\$25,166.37	
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00	\$1,429.00	\$1,583.00	(\$88.38)	
Advertising & Promotion	\$0.00	\$0.00	\$0.00	\$0.00	\$1,472.00	\$755.97	
Incentives	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Other	\$52,754.00	\$41,869.00	\$70,612.00	\$117.00	\$31.00	\$27.48	
Total Utility Costs	\$52,754.00	\$41,869.00	\$70,612.00	\$44,395.00	\$48,976.00	\$35,041.77	\$0.00
Program Participants							
Total Participants	179	140	153	173	76	74	
% of Spending by Customer Segments							
Residential	100%	100%	100%	100%	100%	100%	
Commercial	0%	0%	0%	0%	0%		
Industrial	0%	0%	0%	0%	0%		
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Energy Savings							
Annual kWh Savings @ Meter	0	0	0	0	0	0	
Annual kWh Savings @ Generator	0	0	0	0	0	0	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter	0.000	0.000	0.000	0.000	0.000	0.000	
Peak kW Savings @ Generator	0.000	0.000	0.000	0.000	0.000	0.000	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV						(\$35,042)	
Ratepayer Ratio							
Ratepayer NPV						(\$35,042)	
Participant Ratio							
Participant NPV						\$0	
Societal Ratio							
Societal NPV						(\$35,042)	
Narrative							

Program Name: Lighting - C/I
Program Design Manager: Otter Tail Power
Category: Non-Residential Lighting

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)	\$49,961.00	\$71,076.00	\$0.00				
Delivery (2011-present)				\$142,853.00	\$151,343.00	\$207,929.21	
Administration (2011-present)				\$6,871.00	\$16,892.00	\$38,315.10	
Evaluation, Measurement & Verification	\$0.00	\$2,257.00	\$0.00	\$6,984.00	\$6,484.00	\$2,547.17	
Advertising & Promotion	\$0.00	\$4,733.00	\$0.00	\$2,879.00	\$3,597.00	\$7,298.22	
Incentives	\$113,779.00	\$367,756.00	\$0.00	\$670,418.00	\$974,919.00	\$1,278,990.62	
Other	\$0.00	\$180.00	\$1,077,509.00	\$0.00	\$0.00		
Total Utility Costs	\$163,740.00	\$446,002.00	\$1,077,509.00	\$830,005.00	\$1,153,235.00	\$1,535,080.32	\$0.00
Program Participants							
Total Participants	90	164	431	442	563	640	
% of Spending by Customer Segments							
Residential	0%	0%	0%	0%	0%		
Commercial	70%	70%	70%	70%	70%	70%	
Industrial	30%	30%	30%	30%	30%	30%	
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter	2,956,605	3,582,536	10,500,886	7,008,152	8,483,213	9,334,116	
Annual kWh Savings @ Generator	2,956,605	3,582,536	10,500,886	7,008,152	8,483,213	10,090,936	
Cost per Annual kWh Saved @ Generator	\$0.0554	\$0.1245	\$0.1026	\$0.1184	\$0.1359	\$0.1521	\$0.0000
Peak kW Savings @ Meter	738.590	541.130	1,586.100	1,337.550	1,619.675	1,781.855	
Peak kW Savings @ Generator	738.590	541.130	1,586.100	1,337.550	1,619.675	1,926.330	
Cost per Peak kW Saved @ Generator	\$221.69	\$824.20	\$679.34	\$620.54	\$712.02	\$796.89	\$0.00
Benefit/Cost Ratios							
Utility Ratio						7.63	
Utility NPV						\$10,182,359	
Ratepayer Ratio						1.16	
Ratepayer NPV						\$1,653,086	
Participant Ratio						2.16	
Participant NPV						\$5,474,749	
Societal Ratio						2.95	
Societal NPV						\$9,733,445	
Narrative							

Program Name: Lighting New Construction -C/I
Program Design Manager: Otter Tail Power
Category: Non-Residential Lighting

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)		\$5,345.00	\$0.00				
Delivery (2011-present)				\$5,946.00	\$13,683.00	\$9,612.87	
Administration (2011-present)				\$2,153.00	\$11,091.00	\$8,992.04	
Evaluation, Measurement & Verification		\$1,003.00	\$0.00	\$419.00	\$1,323.00	\$1,514.86	
Advertising & Promotion		\$3,373.00	\$0.00	\$2,247.00	\$2,919.00	\$2,733.83	
Incentives		\$14,747.00	\$0.00	\$49,998.00	\$56,452.00	\$68,251.35	
Other		\$0.00	\$33,678.00	\$0.00	\$0.00		
Total Utility Costs	\$0.00	\$24,468.00	\$33,678.00	\$60,763.00	\$85,468.00	\$91,104.95	\$0.00
Program Participants							
Total Participants		15	39	35	77	54	
% of Spending by Customer Segments							
Residential		0%	0%	0%	0%		
Commercial		70%	70%	70%	70%	70%	
Industrial		30%	30%	30%	30%	30%	
Farm		0%	0%	0%	0%		
Other		0%	0%	0%	0%		
Total % of Spending	0%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)		0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)		0.0%	0.0%	0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter		281,463	642,156	1,406,397	1,768,107	1,347,366	
Annual kWh Savings @ Generator		281,463	642,156	1,406,397	1,768,107	1,456,612	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0869	\$0.0524	\$0.0432	\$0.0483	\$0.0625	\$0.0000
Peak kW Savings @ Meter		42.510	97.000	268.250	337.625	257.206	
Peak kW Savings @ Generator		42.510	97.000	268.250	337.625	278.061	
Cost per Peak kW Saved @ Generator	\$0.00	\$575.58	\$347.20	\$226.52	\$253.14	\$327.64	\$0.00
Benefit/Cost Ratios							
Utility Ratio						18.78	
Utility NPV						\$1,620,152	
Ratepayer Ratio						1.28	
Ratepayer NPV						\$375,182	
Participant Ratio						1.22	
Participant NPV						\$249,729	
Societal Ratio						1.88	
Societal NPV						\$1,007,410	
Narrative							

Program Name: Motors
Program Design Manager: Otter Tail Power
Category: Motors & Drives

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)	\$17,139.00	\$18,411.00	\$0.00				
Delivery (2011-present)				\$39,643.00	\$39,759.00	\$19,318.01	
Administration (2011-present)				\$6,159.00	\$2,827.00	\$4,141.67	
Evaluation, Measurement & Verification	\$0.00	\$1,916.00	\$0.00	\$839.00	\$1,708.00	\$523.24	
Advertising & Promotion	\$0.00	\$3,428.00	\$0.00	\$3,103.00	\$3,911.00	\$2,194.95	
Incentives	\$26,480.00	\$57,590.00	\$0.00	\$217,420.00	\$53,620.00	\$76,213.00	
Other	\$0.00	\$0.00	\$245,254.00	\$0.00	\$0.00		
Total Utility Costs	\$43,619.00	\$81,345.00	\$245,254.00	\$267,164.00	\$101,825.00	\$102,390.87	\$0.00
Program Participants							
Total Participants	156	165	472	610	88	134	
% of Spending by Customer Segments							
Residential	0%	0%	0%	0%	0%	0%	
Commercial	30%	30%	30%	30%	30%	30%	
Industrial	70%	70%	70%	70%	70%	70%	
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter	276,013	241,900	689,186	707,027	192,853	485,267	
Annual kWh Savings @ Generator	276,013	241,900	689,186	707,027	192,853	524,613	
Cost per Annual kWh Saved @ Generator	\$0.1580	\$0.3363	\$0.3559	\$0.3779	\$0.5280	\$0.1952	\$0.0000
Peak kW Savings @ Meter	35.840	29.820	84.950	86.950	24.050	59.986	
Peak kW Savings @ Generator	35.840	29.820	84.950	86.950	24.050	64.850	
Cost per Peak kW Saved @ Generator	\$1,217.05	\$2,727.87	\$2,887.04	\$3,072.62	\$4,233.89	\$1,578.89	\$0.00
Benefit/Cost Ratios							
Utility Ratio						5.27	
Utility NPV						\$436,797	
Ratepayer Ratio						1.12	
Ratepayer NPV						\$59,195	
Participant Ratio						3.78	
Participant NPV						\$346,913	
Societal Ratio						4.60	
Societal NPV						\$543,773	
Narrative							

Program Name: Plan Review - C/I
Program Design Manager: Otter Tail Power
Category: Non-Residential Whole Building - Non-Process Related

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)	\$29,579.00	\$25,914.00	\$0.00				
Delivery (2011-present)				\$12,082.00	\$3,638.00	\$38.36	
Administration (2011-present)				\$228.00	\$405.00		
Evaluation, Measurement & Verification	\$0.00	\$887.00	\$0.00	\$123.00	\$656.00	\$128.09	
Advertising & Promotion	\$0.00	\$1,420.00	\$0.00	\$1,613.00	\$1,478.00	\$842.94	
Incentives	\$31,493.00	\$53,680.00	\$0.00	\$4,174.00	\$0.00		
Other	\$0.00	\$90.00	\$159,029.00	\$0.00	\$0.00		
Total Utility Costs	\$61,072.00	\$81,991.00	\$159,029.00	\$18,220.00	\$6,177.00	\$1,009.39	\$0.00
Program Participants							
Total Participants	6	5	9	2	0		
% of Spending by Customer Segments							
Residential	0%	0%	0%	0%	0%		
Commercial	70%	70%	70%	70%	70%	70%	
Industrial	30%	30%	30%	30%	30%	30%	
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter	802,167	1,231,721	2,822,014	84,492	0	0	
Annual kWh Savings @ Generator	802,167	1,231,721	2,822,014	84,492	0	0	
Cost per Annual kWh Saved @ Generator	\$0.0761	\$0.0666	\$0.0564	\$0.2156	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter	176.690	186.050	426.250	15.725	0.000	0.000	
Peak kW Savings @ Generator	176.690	186.050	426.250	15.725	0.000	0.000	
Cost per Peak kW Saved @ Generator	\$345.64	\$440.69	\$373.09	\$1,158.66	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV						(\$1,009)	
Ratepayer Ratio							
Ratepayer NPV						(\$1,009)	
Participant Ratio							
Participant NPV						\$0	
Societal Ratio							
Societal NPV							
Narrative							

Program Name: PUC Assessments
Program Design Manager: Otter Tail Power
Category: Regulatory Charges

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)	\$0.00	\$0.00	\$0.00				
Delivery (2011-present)				\$0.00	\$0.00		
Administration (2011-present)				\$0.00	\$0.00		
Evaluation, Measurement & Verification	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Advertising & Promotion	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Incentives	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Other	\$126,169.00	\$38,149.00	\$3,610.00	\$8,715.00	\$15,332.00	\$6,180.53	
Total Utility Costs	\$126,169.00	\$38,149.00	\$3,610.00	\$8,715.00	\$15,332.00	\$6,180.53	\$0.00
Program Participants							
Total Participants	0	0	0	0	0		
% of Spending by Customer Segments							
Residential	0%	0%	0%	0%	0%		
Commercial	0%	0%	0%	0%	0%		
Industrial	0%	0%	0%	0%	0%		
Farm	0%	0%	0%	0%	0%		
Other	100%	100%	100%	100%	100%		
Total % of Spending	100%	100%	100%	100%	100%	0%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter	0	0	0	0	0	0	
Annual kWh Savings @ Generator	0	0	0	0	0	0	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter	0.000	0.000	0.000	0.000	0.000	0.000	
Peak kW Savings @ Generator	0.000	0.000	0.000	0.000	0.000	0.000	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV						(\$6,181)	
Ratepayer Ratio							
Ratepayer NPV						(\$6,181)	
Participant Ratio							
Participant NPV							
Societal Ratio							
Societal NPV							
Narrative							

Program Name: ReDirect
Program Design Manager: Otter Tail Power
Category: Non-Residential Whole Building - Non-Process Related

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Active	Active	Active	Inactive	Inactive	Inactive
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)		\$5,497.00	\$0.00				
Delivery (2011-present)				\$271.00	\$0.00		
Administration (2011-present)				\$171.00	\$0.00		
Evaluation, Measurement & Verification		\$677.00	\$0.00	\$0.00	\$0.00		
Advertising & Promotion		\$388.00	\$0.00	\$0.00	\$0.00		
Incentives		\$0.00	\$0.00	\$0.00	\$0.00		
Other		\$0.00	\$1,718.00	\$0.00	\$0.00		
Total Utility Costs	\$0.00	\$6,562.00	\$1,718.00	\$442.00	\$0.00	\$0.00	\$0.00
Program Participants							
Total Participants		1	0	0	0		
% of Spending by Customer Segments							
Residential		0%	0%	0%	0%		
Commercial		100%	100%	100%	100%		
Industrial		0%	0%	0%	0%		
Farm		0%	0%	0%	0%		
Other		0%	0%	0%	0%		
Total % of Spending	0%	100%	100%	100%	100%	0%	0%
Low-Income Participation							
Participant % (% of Total Participants)		0.0%	0.0%	0.0%	0.0%		
Budget % (% of Total Utility Costs)		0.0%	0.0%	0.0%	0.0%		
Energy Savings							
Annual kWh Savings @ Meter		67,888	0	0	0		
Annual kWh Savings @ Generator		67,888	0	0	0		
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0967	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter		10.260	0.000	0.000	0.000		
Peak kW Savings @ Generator		10.260	0.000	0.000	0.000		
Cost per Peak kW Saved @ Generator	\$0.00	\$639.57	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV							
Ratepayer Ratio							
Ratepayer NPV							
Participant Ratio							
Participant NPV							
Societal Ratio							
Societal NPV							
Narrative							

Program Name: Refrigeration
Program Design Manager: Otter Tail Power
Category: Non-Residential Refrigeration

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)	\$16,579.00	\$22,421.00	\$0.00				
Delivery (2011-present)				\$43,595.00	\$36,280.00	\$37,461.25	
Administration (2011-present)				\$3,973.00	\$5,956.00	\$12,052.52	
Evaluation, Measurement & Verification	\$0.00	\$1,440.00	\$0.00	\$326.00	\$1,471.00	\$1,328.93	
Advertising & Promotion	\$0.00	\$4,436.00	\$0.00	\$2,215.00	\$2,343.00	\$2,227.03	
Incentives	\$15,698.00	\$16,754.00	\$0.00	\$74,851.00	\$128,438.00	\$121,108.00	
Other	\$0.00	\$0.00	\$75,832.00	\$0.00	\$0.00		
Total Utility Costs	\$32,277.00	\$45,051.00	\$75,832.00	\$124,960.00	\$174,488.00	\$174,177.73	\$0.00
Program Participants							
Total Participants	8	57	41	117	429	107	
% of Spending by Customer Segments							
Residential	0%	0%	0%	0%	0%	0%	
Commercial	90%	90%	90%	90%	90%	90%	
Industrial	10%	10%	10%	10%	10%	10%	
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter	253,742	499,857	632,635	929,235	1,071,480	1,191,896	
Annual kWh Savings @ Generator	253,742	499,857	632,635	929,235	1,071,480	1,288,536	
Cost per Annual kWh Saved @ Generator	\$0.1272	\$0.0901	\$0.1199	\$0.1345	\$0.1628	\$0.1352	\$0.0000
Peak kW Savings @ Meter	22.760	75.500	95.550	177.600	204.425	227.532	
Peak kW Savings @ Generator	22.760	75.500	95.550	177.600	204.425	245.981	
Cost per Peak kW Saved @ Generator	\$1,418.15	\$596.70	\$793.64	\$703.60	\$853.56	\$708.10	\$0.00
Benefit/Cost Ratios							
Utility Ratio						5.79	
Utility NPV						\$835,078	
Ratepayer Ratio						1.09	
Ratepayer NPV						\$81,517	
Participant Ratio						5.79	
Participant NPV						\$759,749	
Societal Ratio						5.92	
Societal NPV						\$1,000,691	
Narrative							

Program Name: Regulatory Assessments
Program Design Manager: Otter Tail Power
Category: Regulatory Charges

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)		\$0.00	\$0.00				
Delivery (2011-present)				\$0.00	\$0.00		
Administration (2011-present)				\$0.00	\$0.00		
Evaluation, Measurement & Verification		\$0.00	\$0.00	\$0.00	\$0.00		
Advertising & Promotion		\$0.00	\$0.00	\$0.00	\$0.00		
Incentives		\$0.00	\$0.00	\$0.00	\$0.00		
Other		\$86,339.00	\$87,994.00	\$92,021.00	\$92,785.00	\$95,686.50	
Total Utility Costs	\$0.00	\$86,339.00	\$87,994.00	\$92,021.00	\$92,785.00	\$95,686.50	\$0.00
Program Participants							
Total Participants		0	0	0	0		
% of Spending by Customer Segments							
Residential		0%	0%	0%	0%		
Commercial		0%	0%	0%	0%		
Industrial		0%	0%	0%	0%		
Farm		0%	0%	0%	0%		
Other		100%	100%	100%	100%		
Total % of Spending	0%	100%	100%	100%	100%	0%	0%
Low-Income Participation							
Participant % (% of Total Participants)		0.0%	0.0%	0.0%	0.0%	0.0%	
Budget % (% of Total Utility Costs)		0.0%	0.0%	0.0%	0.0%	0.0%	
Energy Savings							
Annual kWh Savings @ Meter		0	0	0	0	0	
Annual kWh Savings @ Generator		0	0	0	0	0	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter		0.000	0.000	0.000	0.000	0.000	
Peak kW Savings @ Generator		0.000	0.000	0.000	0.000	0.000	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV						(\$95,687)	
Ratepayer Ratio							
Ratepayer NPV						(\$95,687)	
Participant Ratio							
Participant NPV						\$0	
Societal Ratio							
Societal NPV						\$0	
Narrative							

Program Name: Residential Demand Control
Program Design Manager: Otter Tail Power
Category: Residential Load Management

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)	\$17,147.00	\$14,164.00	\$16,105.00				
Delivery (2011-present)				\$7,969.00	\$5,569.00	\$4,885.20	
Administration (2011-present)				\$503.00	\$428.00	\$548.72	
Evaluation, Measurement & Verification	\$0.00	\$547.00	\$0.00	\$457.00	\$525.00		
Advertising & Promotion	\$0.00	\$2,818.00	\$0.00	\$1,172.00	\$2,568.00	\$865.33	
Incentives	\$5,700.00	\$25,401.00	\$0.00	\$8,819.00	\$6,943.00		
Other	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Total Utility Costs	\$22,847.00	\$42,930.00	\$16,105.00	\$18,920.00	\$16,033.00	\$6,299.25	\$0.00
Program Participants							
Total Participants	19	30	8	8	6		
% of Spending by Customer Segments							
Residential	100%	100%	100%	100%	100%		
Commercial	0%	0%	0%	0%	0%		
Industrial	0%	0%	0%	0%	0%		
Farm	0%	0%	0%	0%	0%		
Other	0%	0%	0%	0%	0%		
Total % of Spending	100%	100%	100%	100%	100%	0%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Budget % (% of Total Utility Costs)	0.0%	0.0%	0.0%	0.0%	0.0%	31.0%	
Energy Savings							
Annual kWh Savings @ Meter	10,624	16,589	4,423	4,423	3,317	0	
Annual kWh Savings @ Generator	10,624	16,589	4,423	4,423	3,317	0	
Cost per Annual kWh Saved @ Generator	\$2.1505	\$2.5879	\$3.6412	\$4.2776	\$4.8336	\$0.0000	\$0.0000
Peak kW Savings @ Meter	115.890	216.660	57.780	57.350	43.475	0.000	
Peak kW Savings @ Generator	115.890	216.660	57.780	57.350	43.475	0.000	
Cost per Peak kW Saved @ Generator	\$197.14	\$198.14	\$278.73	\$329.90	\$368.79	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV						(\$6,299)	
Ratepayer Ratio							
Ratepayer NPV						(\$6,299)	
Participant Ratio							
Participant NPV						\$0	
Societal Ratio							
Societal NPV						\$0	
Narrative							

Program Name: Technical Research
Program Design Manager: Otter Tail Power
Category: Other - Indirect

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Active	Active	Inactive	Inactive	Inactive	Inactive	Inactive
Utility Metrics							
kWh Line Loss Factor							
kW Line Loss Factor							
Utility Cost Components							
Delivery and Administration (2008-2010)	\$29,238.00	\$9,218.73					
Delivery (2011-present)							
Administration (2011-present)							
Evaluation, Measurement & Verification	\$0.00	\$0.00					
Advertising & Promotion	\$0.00	\$0.00					
Incentives	\$0.00	\$0.00					
Other	\$0.00	\$0.00					
Total Utility Costs	\$29,238.00	\$9,218.73	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Program Participants							
Total Participants	2	0					
% of Spending by Customer Segments							
Residential	0%	0%					
Commercial	50%	0%					
Industrial	50%	0%					
Farm	0%	0%					
Other	0%	100%					
Total % of Spending	100%	100%	0%	0%	0%	0%	0%
Low-Income Participation							
Participant % (% of Total Participants)	0.0%	0.0%					
Budget % (% of Total Utility Costs)	0.0%	0.0%					
Energy Savings							
Annual kWh Savings @ Meter	0	0					
Annual kWh Savings @ Generator	0	0					
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
Peak kW Savings @ Meter	0.000	0.000					
Peak kW Savings @ Generator	0.000	0.000					
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Benefit/Cost Ratios							
Utility Ratio							
Utility NPV							
Ratepayer Ratio							
Ratepayer NPV							
Participant Ratio							
Participant NPV							
Societal Ratio							
Societal NPV							
Narrative							

Program Name: Town Energy Challenge Pilot
Program Design Manager: Otter Tail Power
Category: Other - Direct

	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2015 Plan
	Inactive	Active	Active	Active	Active	Active	Active
Utility Metrics							
kWh Line Loss Factor						7.500%	
kW Line Loss Factor						7.500%	
Utility Cost Components							
Delivery and Administration (2008-2010)		\$0.00	\$0.00				
Delivery (2011-present)				\$19,286.00	\$10,144.00	\$0.00	
Administration (2011-present)				\$29,798.00	\$412.00	\$10,960.00	
Evaluation, Measurement & Verification		\$0.00	\$0.00	\$30,927.00	\$491.00	\$957.73	
Advertising & Promotion		\$0.00	\$0.00	\$11,954.00	\$1,342.00	\$1,018.39	
Incentives		\$0.00	\$0.00	\$0.00	\$0.00		
Other		\$67,035.00	\$228,234.00	\$505.00	\$700.00	\$450.00	
Total Utility Costs	\$0.00	\$67,035.00	\$228,234.00	\$92,470.00	\$13,089.00	\$13,386.12	\$0.00
Program Participants							
Total Participants		0	743	304	321	366	
% of Spending by Customer Segments							
Residential		50%	50%	50%	50%	50%	
Commercial		50%	50%	50%	50%	50%	
Industrial		0%	0%	0%	0%		
Farm		0%	0%	0%	0%		
Other		0%	0%	0%	0%		
Total % of Spending	0%	100%	100%	100%	100%	100%	0%
Low-Income Participation							
Participant % (% of Total Participants)		0.0%	0.0%	0.0%	0.0%	15.8%	
Budget % (% of Total Utility Costs)		0.0%	0.0%	0.0%	0.0%	15.8%	
Energy Savings							
Annual kWh Savings @ Meter		0	697,834	295,249	265,987	97,095	
Annual kWh Savings @ Generator		0	697,834	295,249	265,987	104,968	
Cost per Annual kWh Saved @ Generator	\$0.0000	\$0.0000	\$0.3271	\$0.3132	\$0.0492	\$0.1275	\$0.0000
Peak kW Savings @ Meter		0.000	206.275	58.275	52.725	57.581	
Peak kW Savings @ Generator		0.000	206.275	58.275	52.725	62.250	
Cost per Peak kW Saved @ Generator	\$0.00	\$0.00	\$1,106.45	\$1,586.79	\$248.25	\$215.04	\$0.00
Benefit/Cost Ratios							
Utility Ratio						2.40	
Utility NPV						\$18,689	
Ratepayer Ratio						0.79	
Ratepayer NPV						(\$8,373)	
Participant Ratio							
Participant NPV						\$28,338	
Societal Ratio						2.49	
Societal NPV						\$19,965	
Narrative							

CERTIFICATE OF SERVICE

RE: In the Matter of Otter Tail Power Company's 2013 Demand Side Management Financial Incentive Project, Annual Filing to Update the Conservation Improvement Project Rider, and 2013 CIP Status Report
Docket Nos. E017/M-14-201, E017/CIP-10-356.03

I, Jana Emery, hereby certify that I have this day served a copy of the following, or a summary thereof, on Dr. Burl W. Haar and Sharon Ferguson by e-filing, and to all other persons on the attached service list by electronic service or by First Class mail.

Otter Tail Power Company
Compliance Filing

Dated this **1st** day of **April, 2014**

/s/ JANA EMERY

Jana Emery, Regulatory Filing Coordinator
Otter Tail Power Company
215 South Cascade Street
Fergus Falls MN 56537
(218) 739-8879

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Paula N.	Johnson	PaulaJohnson@alliantenergy.com	Interstate Power and Light Company	200 First Street SE PO Box 351 Cedar Rapids, IA 524060351	Electronic Service	No	OFF_SL_10-356_CIP-10-356
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Douglas	Larson	dlarson@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	OFF_SL_10-356_CIP-10-356
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	No	OFF_SL_10-356_CIP-10-356

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Larry	Oswald		Honeywell, Inc.	1335 2nd Ave N Ste B Fargo, ND 58103	Paper Service	No	OFF_SL_10-356_CIP-10-356
Kim	Pederson	kpederson@otpc.com	Otter Tail Power Company	215 S Cascade St PO Box 496 Fergus Falls, MN 565380496	Electronic Service	No	OFF_SL_10-356_CIP-10-356
Lisa	Pickard	lpickard@minnkota.com	Minnkota Power Cooperative	1822 Mill Rd PO Box 13200 Grand Forks, ND 582083200	Electronic Service	No	OFF_SL_10-356_CIP-10-356
Michael	Sachse	N/A	Opower	1515 N Courthouse Rd FL 8 Arlington, VA 22201	Paper Service	No	OFF_SL_10-356_CIP-10-356
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Roger	Warehime	warehimer@owatonnautilities.com	Owatonna Public Utilities	208 South WalnutPO Box 800 Owatonna, MN 55060	Electronic Service	No	OFF_SL_10-356_CIP-10-356
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Gary	Chesnut	gchesnut@agp.com	AG Processing Inc. a cooperative	12700 West Dodge Road PO Box 2047 Omaha, NE 681032047	Electronic Service	No	GEN_SL_Otter Tail Power Company_General Service List - Tariff Filing
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Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	No	GEN_SL_Otter Tail Power Company_General Service List - Tariff Filing
Shane	Henriksen	shane.henriksen@enbridge.com	Enbridge Energy Company, Inc.	1409 Hammond Ave FL 2 Superior, WI 54880	Electronic Service	No	GEN_SL_Otter Tail Power Company_General Service List - Tariff Filing
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Paula N.	Johnson	PaulaJohnson@alliantenergy.com	Interstate Power and Light Company	200 First Street SE PO Box 351 Cedar Rapids, IA 524060351	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
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Tina	Koecher	tkoecher@mnpower.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Allan	Lian	alian@mnpower.com	Minnesota Power	30 W Superior St Duluth, MN 55802	Electronic Service	No	SPL_SL__CIP SPECIAL SERVICE LIST
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