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April 1, 2015

Mr. Daniel Wolf
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: 2014 Demand Side Management Financial Incentive Project
Docket No. E017/M-15-279

Annual Filing to Update the Conservation Improvement Project Rider
Docket No. E017/M-15-279

2014 Conservation Improvement Project Status Report
Docket No. E017/CIP-13-277.01

Dear Mr. Wolf 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) 739-8639 or JGrenier@otpco.com.

Very truly yours,

/s/ JASON GRENIER
Jason Grenier, Manager
Market Planning

jce
Enclosures
By electronic filing
c: Service List

2014 DSM INCENTIVE, FILING TO UPDATE THE RIDER, AND STATUS REPORT EXECUTIVE SUMMARY

On April 1, 2015, 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 $2,957,972 for 2014.

On April 1, 2015, Otter Tail Power Company filed its 2014 Status Report.

On April 1, 2015, 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 2014 Conservation Improvement Program:

- The Company achieved 1.62[1] percent energy savings as a percent of retail energy sales, above our approved goal of 1.51 percent.
- The Company achieved energy savings of 33,805,392 kWh, exceeding goal by 107 percent. Demand savings were 131 percent of goal.
- The cost per kWh for *first year* savings is $0.15 (15 cents) compared to a budgeted cost of $0.18 (18 cents). Costs are in line with historical averages of $0.15.
- Expenditures were under budget (91%) at $5,188,931 based on an approved budget of $5,706,409.
- Net benefits of $26,275,803 were achieved excluding the negative net benefits from assessments and the low income program.

Requests for Approval

- The Company is requesting approval for $2,957,972 in performance incentives for 2014 CIP activities, a small share of the total net benefits from investments in CIP.
- The Company is requesting the Conservation Cost Recovery Adjustment ("CCRA") factor of $0.00287 per kWh be reflected on customers' bills through the Resource Adjustment starting with bills rendered (dated) on and after October 1, 2015.

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

- 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 2014 CIP Tracker, resulting in a year-end balance of $5,731,183.

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 continue to 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: 15-279 or 13-277.01.

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

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-15-279
In the Matter of Otter Tail Power Company's Annual Filing to Update the Conservation Improvement Project Rider	Docket No. E017/M-15-279
Status Report – 2014 CIP Activities	Docket No. E017/CIP-13-277.01

SUMMARY OF FILING

Otter Tail Power Company ("Otter Tail") is requesting approval of a financial incentive of $2,957,972 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 $0.00287 per kWh be reflected on customers' bills through the Resource Adjustment starting with bills rendered (dated) on and after October 1, 2015.

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 2014 CIP Tracker, resulting in a year-end 2014 balance of $5,731,183.

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-15-279
In the Matter of Otter Tail Power Company's Annual Filing to Update the Conservation Improvement Project Rider	Docket No. E017/M-15-279
Status Report – 2014 CIP Activities	Docket No. E017/CIP-13-277.01

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 $2,957,972 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 $0.00287 per kWh be reflected on customers' bills through the Resource Adjustment starting with bills rendered (dated) on and after October 1, 2015.

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 2014 CIP Tracker, resulting in a year-end 2014 balance of $5,731,183.

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.[2] 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 model[3] 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.

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 December 20, 2012, the PUC issued an order adopting additional modifications to the Shared Savings Model recommended by the Division of Energy Resources ("DER"). The PUC's order incorporated the modifications set forth below. Included are the modifications that are specific to Otter Tail:

- For utilities with triennial Conservation Improvement Programs beginning in 2014, the threshold shall be set at half of the utility's average achievements from 2008 to 2012, removing both the maximum and minimum achievements, or at 0.4 percent of retail sales, whichever is lowest. The calibration at 1.5 percent of retail sales for each utility set at $0.07 per kWh for electric utilities.
- The incentive shall be capped at 20 percent of net benefits for all utilities except for Minnesota Power.
- The existing cap of 125 percent of a utility's 1.5 percent calibration level for the electric utilities ($0.0875 per kWh).
- The costs of any mandated, non-third-party projects (e.g., Next Generation Energy Act assessment, University of Minnesota Institute for Renewable Energy, and the Environment costs) shall be excluded from the calculation of net benefits awarded at specific energy

[2] Docket No. E017/M-94-539
[3] Docket No. E,G999/CIP-08-133

savings levels (calculated before the CIP year begins) and in the post-CIP year calculations of net benefits and energy savings achieved and incentive awarded.

On January 31, 2014, Otter Tail filed its Financial Incentive Proposal Compliance Filing which included 2014 approved budgets, goals, net benefits, and resulting incentive levels with the PUC and the DER. The filing establishes the 2014 incentive at approved goal. On January 12, 2015, the DER issued a Decision approving the 2014 Compliance Filing.

II. REQUEST FOR APPROVAL

Financial Incentive Filing

Otter Tail respectfully requests that a financial incentive of $2,957,972 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 $0.00287 be reflected on customers' bills through the Resource Adjustment starting with bills rendered (dated) on and after October 1, 2015.

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 October 1, 2015. In general, the notification will state "Beginning October 1, the Resource Adjustment includes a CCRA factor of $0.00287/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:

Jason Grenier
Otter Tail Power Company
215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56538-0496
(218) 739-8636 Phone
(218) 739-8941 FAX

B. The effective date of the CIP Rider is October 1, 2015. 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

2014 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	$2,334,820
Approved Budget	$5,706,409
2014 Actual Spending	$5,188,931

2014 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 2010-2012 weather normalized sales.

Energy savings goal @ 1%	20,914,413 kWh
Approved Energy Savings Goal	31,485,424 kWh
2014 Actual Energy Savings Goal	33,805,392 kWh

2014 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%	$ 98,776
Low-income approved budget	$150,000
Low-income actual spend	$142,588

2014 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.2411, 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.

Sustainable Buildings Certification

The Company has complied with Minn. Statute 216B.241, subd. 1f(c) that requires utilities to include in their CIP plans projects that facilitate professional engineering verification to qualify a building as ENERGY STAR labeled, Leadership in Energy and Environmental Design (LEED) certified, or Green Globes certified. The Company's Commercial Design Assistance project facilitates sustainable building labeling and certification.

Sustainable Building 2030 Standards

The Company has complied with Minn. Statute 216B.241, subd. 9(e) that requires utilities to develop conservation improvement projects to support attaining energy efficiency goals consistent with Sustainable Buildings 2030 (SB 2030) standards. The Company's Commercial Design Assistance project supports the SB 2030 standards.

Triennial Decision Requirements

The Company has complied with the following additional requirements established in the DER Deputy Commissioner's Decision on October 10, 2013:

- The Company is required to submit a Compliance Filing within 45 days of the adoption of new state energy codes analyzing the impact of the new codes on the Company's approved energy savings methodologies. The Company continues to monitor the development and implementation of new energy codes, with the expectation the new codes will be issued in 2015. Once these codes are issued, the Company plans to comply with this requirement.
- Inclusion of any formal or informal modifications to its CIP in the Status Report

- Inclusion of programs that facilitate Energy Star labeling, LEED certification, or Green Globes certification of commercial buildings; and
- Offer Sustainable Buildings 2030-specific services through its existing programs.

Budget Modifications

No budget modifications were requested for 2014 CIP.

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 2014, 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 the entire projected annual energy savings in 2014 with any adjustment being accounted for in 2015. Measurement and verification of the project will be completed in 2015. A full report according to the M & V Protocols will be provided to the DER for review.

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 2014 employee expenses as follows:

Section	Amount	Description
Travel Expense	$30,275.60	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	$6,713.37	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	$4,258.73	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	$41,247.70	

Total 2014 employee expenses that were included in Otter Tail's CIP Tracker were $41,248. The total employee expense is 0.79 percent of the total 2014 CIP Tracker expenses of $5,188,931.

Otter Tail's total employee expense exceeds the DER recommended employee expense of 0.5 percent of total CIP expenses by $15,303.05. Otter Tail 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. Otter Tail employees frequently travel hundreds of miles a day for the development and promotion of CIP. Otter Tail respectfully asks the DER to consider these circumstances when reviewing Otter Tail'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 2014 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 percent 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 2014 DSM Financial Incentive, totaling $2,957,972.
- Approval of the 2014 CIP Tracker, resulting in a year-end balance of $5,731,183
- Approval to implement the CCRA factor of $0.00287/kwh reflected on customers' bills through the Resource Adjustment starting with bills rendered on and after October 1, 2015.
- 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 2014 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) 739-8639 or JGrenier@otpco.com.

Dated: April 1, 2015

Respectfully submitted,

OTTER TAIL POWER COMPANY

By: */s/ JASON GRENIER*

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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 2014 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 – 2014 CIP Tracker
Table 2A	2014 Incentive Mechanism – Pre-Year Inputs
Table 2B	2014 Incentive Mechanism – Post-Year Results
Table 3	2014 Project Costs, Savings, and Benefits
Table 4	2014 Benefit Cost Ratios
Table 5	2014 CIP Program Status Report
Table 6	2014 CIP Program Status Report – Costs per kW & per kWh

[1] Docket No. E,G999/CI-08-133

I. DISCUSSION OF 2014 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 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 model[2] 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 2014-2016.

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") to be applied for counting behavioral project savings with a three-year minimum lifetime, effective with the 2013 program year. Otter Tail has adopted the ASM for calculating energy savings applied to the incentive calculation.

On December 20, 2012, the PUC issued an order adopting additional modifications to the Shared Savings Model recommended by the DER. The PUC's order incorporated the modifications set forth below. Included are the modifications that are specific to Otter Tail:

- For utilities with triennial Conservation Improvement Programs beginning in 2014, the threshold shall be set at half of the utility's average achievements from 2008 to 2012, removing both the maximum and minimum achievements, or at 0.4 percent of retail sales, whichever is lowest. The calibration at 1.5 percent of retail sales for each utility set at $0.07 per kWh for electric utilities.

[2] Docket E,G999/CIP-08-133

- The incentive shall be capped at 20 percent of net benefits for all utilities except for Minnesota Power.
- The existing cap of 125 percent of a utility's 1.5 percent calibration level for the electric utilities ($0.0875 per kWh).
- The costs of any mandated, non-third-party projects (e.g., Next Generation Energy Act assessment, University of Minnesota Institute for Renewable Energy, and the Environment costs) shall be excluded from the calculation of net benefits awarded at specific energy savings levels (calculated before the CIP year begins) and in the post-CIP year calculations of net benefits and energy savings achieved and incentive awarded.

On January 31, 2014, Otter Tail filed its Financial Incentive Proposal Compliance Filing which included 2014 approved budgets, goals, net benefits, and resulting incentive levels with the Minnesota PUC and the Department of Commerce ("Department"). The filing establishes the 2014 incentive at approved goal. On January 12, 2015, the Department issued a Decision approving the 2014 Compliance Filing.

As part of this April 1, 2015, filing under section II, the Company is providing the 2014 proposed incentive. The following steps are used in the incentive calculation:

1. The 2014 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 2008-2012, 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 2014 energy saving model is calibrated at 20,914,413 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 2014 CIP approved energy goal is 31,485,424 kWh as shown in Appendix A, Table 2, based on the DER's May 20, 2014 approval of Otter Tail's 2014–2016 CIP plan.

3. As outlined in Appendix A, Table 2A, the incentive calibration establishes that the Company will receive a linear multiplier of 0.00885 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 13.16 steps of "0.1 percent of sales saved" above the zero point. (13.16 x .00885 multiplier = 11.65 percent multiplier of 2014 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 2014 CIP Projects, each as proposed and approved by the Department, and each with actual 2014 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 33,805,392 kWh, or 1.62 percent of historic average retail sales, and total net benefits are calculated to be $26,035,459.** The 2014 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 2014 CIP Project. Figures are listed for each project "as filed" as part of the 2014-2016 CIP Triennial Filing and "as actual" reflecting 2014 actual participation, savings, and costs.
8. As detailed in Appendix A, Table 2B and based on the corresponding percentage of net benefits (11.65%), the total incentive amount requested is **$2,957,972.**

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 2014 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 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 2014, Otter Tail's average first year cost per kWh saved was 15 cents, which is on par with the seven-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 (2008-2014)

	2008	2009	2010	2011	2012	2013	2014
DSM Financial Incentive	$273,798	$1,101,060	$3,531,538	$2,608,094	$2,681,575	$4,026,600	$2,957,972
CIP Expenditures	$2,345,874	$4,093,050	$4,984,050	$4,344,581	$4,816,994	$5,259,625	$5,188,931
Achieved Energy Savings (kWh)	15,994,719	35,706,319	31,792,750	27,957,635	30,793,654	35,792,002	33,805,392
Average Cost per kWh Saved	$0.15	$0.11	$0.16	$0.16	$0.16	$0.15	$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 (2014) benefit/cost analysis using DSMore™ software. The utility benefits are aggregated for the lifetime of all CIP energy efficiency measures, discounted back to 2014 dollars using the utility discount rate of 8.61 percent for the utility test and 2.68 percent for the societal test, these rates were approved in the 2014-2016 CIP filing.

As shown in Table 3 of Appendix A, the estimated net benefits for the 2014 Proposed CIP are $20,529,712. Additional details of the total costs and the total benefits from benefit/cost analysis of the 2014 Proposed CIP portfolio include:

Program Costs - Proposed 2014**	
Delivery/Implementation/Administration Costs	3,055,882
Incentives	2,650,527
Total Costs	5,706,409
Program Benefits - Proposed 2014*	
Avoided T&D Electric	7,068,419
Cost-Based Avoided Electric Production	12,868,745
Cost-Based Avoided Electric Capacity	6,248,055
Cost-Based Avoided Ancillary	50,902
Total Benefits	26,236,121
Net Benefits - Proposed 2014	20,529,712
Benefit/Cost Results - Proposed 2014	4.60

*Benefits are based on lifetime benefits, discounted back to 2014 dollars using 8.61 percent utility discount rate.
**Costs include assessments.

As shown in Table 3 of Appendix A, the actual net benefits of $26,035,459 for 2014 CIP are higher than the proposed net benefits. Additional details of the total costs and the total benefits from the DSMore analysis of the 2014 Actual CIP portfolio include:

Program Costs - Actual 2014**	
Delivery/Implementation/Administration Costs	2,374,221
Incentives	2,814,709
Total Costs	5,188,931
Program Benefits - Actual 2014*	
Avoided T&D Electric	8,000,113
Cost-Based Avoided Electric Production	14,913,938
Cost-Based Avoided Electric Capacity	8,252,516
Cost-Based Avoided Ancillary	57,822
Total Benefits	31,224,390
Net Benefits - Actual 2014	26,035,459
Benefit/Cost Results - Actual 2014	6.02

*Benefits are based on lifetime benefits, discounted back to 2014 dollars using 8.61 percent utility discount rate.
**Costs include assessments.

CIP Cost Breakdown - 2014				
	Proposed Costs		Actual Costs	
Delivery	$3,055,882	54%	$2,374,221	46%
Incentives	$2,650,527	46%	$2,814,709	54%
Budget Modification	$0	0%	$0	0%
Total CIP Costs	$5,706,409	100%	$5,188,931	100%

IV. REQUEST FOR APPROVAL

Financial Incentive Filing

- Otter Tail respectfully requests that an incentive of $2,957,972 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 October 1, 2015.
- 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 Jason Grenier at (218)739-8639 or JGrenier@otpco.com.

Dated: April 1, 2015

Respectfully submitted,

OTTER TAIL POWER COMPANY

By: */s/ JASON GRENIER*

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Status Report

Status Report

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STATUS REPORT - 2014 CIP PROJECTS

The 2014 Conservation Improvement Project ("CIP") Status Report has been combined with the 2014 Financial Incentive Filing, produced annually on April 1. The Status Report covers all 2014 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
- Electronically Commutated Motors (ECM)
- Energy Feedback Program
- Geothermal Heat Pumps
- Home Insulation
- Home Transformer
- School Kits
- Water Heater Store & Save

Commercial

-
- Adjustable Speed Drives
- Air Conditioning Control
- Air Source Heat Pumps
- Commercial Design Assistance
- Geothermal Heat Pumps
- Grants
- Industrial Focused Efficiency
- Lighting – Retrofits
- Lighting – New Construction
- Motors
- PC Power Supply
- Recommissioning
- 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
- Made in Minnesota Solar Assessment

Miscellaneous / Inactive Program Costs

- Accounting Adjustments
- Town Energy Challenge Pilot
- Residential Demand Control
- Business Education
- Otter Tail Power Company CIP Projects
- Carrying Charges

DIRECT IMPACT – RESIDENTIAL

AIR CONDITIONING CONTROL

The CoolSavings 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 January, and April 2014.
- Television and radio campaign conducted in conjunction with the Advertising and Education program.
- Customer care booklet that is sent to all new customers.
- Hero-spots on the Company website during February, March, and July.
- Pocket calendar and products and services guide.
- Presentations and literature distribution at workshops.
- Annual and monthly service rep training.
- Agency training for House Therapy contractors.
- 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 rebate page described within the Company's web site.

In 2014, Otter Tail controlled air conditioning 27 days totaling 48 hours and 37 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 2015 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Air Conditioning Control (R)	**Actual**	**Proposed**	**% of Goal**
Participation	72	150	48%
Budget $	$49,219	$80,000	62%

Evaluation Methodology

Energy savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

ENERGY AND DEMAND RESULTS – 2014	
Air Conditioning Control (R)	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	3,474
Demand Savings – kW	51.151

AIR SOURCE HEAT PUMPS
(Residential)

The Air Source Heat Pump ("ASHP") 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 2014, Otter Tail again relied on Energy Star qualifications as the minimum equipment efficiency requirement for this program. This Program is included in the 2015 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 Power Company 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 Contractor workshops
- 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 rebate pages described within the Company's web site

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Air Source Heat Pumps (R)	**Actual**	**Proposed**	**% of Goal**
Participation	98	137	72%
Budget $	$67,881	$121,000	56%

To increase 2015 participation, the Company increased rebates for ASHP from $240/ton to

$400/ton. The Company anticipates the increased rebate amount will drive customers to install an efficient ASHP.

Evaluation Methodology

An engineering analysis was used to determine energy savings for each air source heat pump system installed. The engineering analysis is consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

For 2014, Otter Tail recognizes 8,664 kilowatt-hours of energy savings at the generator, based on an actual installed average size residential air source unit of greater than 2.3 tons, including both summer cooling and winter shoulder-heating savings. Summer coincident demand savings are approximately 0.13 kW per unit at the generator.

In compliance with the November 5, 2010 Final Decision in the 2011-2013 Triennial filing[1], 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 2014 CIP.

ENERGY AND DEMAND RESULTS – 2014	
Air Source Heat Pumps (R)	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	849,067
Demand Savings – kW	13.041

APPLIANCE RECYCLING

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

Otter Tail Power Company promotes appliance recycling using various resources.

- Bill inserts targeted at residential customers in March, May, and July
- Radio campaign on local stations
- Program information, instructions about how to schedule appliance pickup, hero ads placed on the Company's web page
- Brochures available in customer service center lobbies and by request

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

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	306
Freezers	143
Total Units Recycled	449

This Program is included in the 2015 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Appliance Recycling	**Actual**	**Proposed**	**% of Goal**
Participation	449	545	82%
Budget $	$91,078	$115,000	79%

Evaluation Methodology

The Company uses figures from the Technical Reference Manual ("TRM") for calculating savings for the removal and recycling of second household refrigerators and freezers.

Energy Savings & Adjustments

ENERGY AND DEMAND RESULTS – 2014	
Appliance Recycling	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	475,932
Demand Savings – kW	66.696

BE BRIGHT

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 also promoted on a small scale to consumers by offering special promotions. We plan to expand the promotion of LEDs in 2015.

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 of up to $2 per CFL and $10 per LED
- Leverage 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 11 retailers in our service territory who participated in the 2014 campaign, contributing to sales of 111,329, bulbs. This is a substantial increase over last year's numbers. We added big box retailers in Bemidji and Crookston, and WECC added more staff to make more frequent visits to the retailers. We also increased promotion of LED bulbs.

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

- A bill insert
- The Company's web site
- Newspaper ads
- On-site promotion at the location of a participating retailer
- Brochures available in customer service center lobbies and by request

The Company added another component to this program in 2014 by providing CFLs to non-profit organizations to sell to our customers as a fundraising program. The program was offered initially in the southern portion of our service area. Interested eligible groups and organizations were recruited. Each participating organization signed a contract and agreed to sell bulbs only to Otter Tail customers and to use an approved signature sheet to collect the names and location of those buying the bulbs.

To reconcile the bulb disbursement the organizations returned signature sheets and a count of any remaining bulb inventories. There were 17 organizations that participated and approximately 5,400 bulbs sold.

We will expand the non-profit promotion to the central portion of our service territory in 2015. We expect participation will increase with a full year of sales/promotion.

We promoted the non-profit part of the program through:

- Radio announcements
- Mailers sent to schools in the territory eligible for the program
- Information cards placed in our Customer Service Center and distributed by local Service Reps
- Promotion by OTP employees

The Be Bright Program has been approved for continuation in the 2015 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Be Bright	**Actual**	**Proposed**	**% of Goal**
Participation	111,329	96,000	116%
Budget $	$244,783	$346,000	71%

Evaluation Methodology

Energy savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

ENERGY AND DEMAND RESULTS – 2014	
Be Bright	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	4,389,009
Demand Savings – kW	514.969

ELECTRONICALLY COMMUTATED MOTORS (ECM)

The ECM program encourages customers to install an efficient ECM when putting in a new heating system instead of selecting a system with a lower efficiency motor. ECMs use significantly less electricity to deliver warm air from the furnace and cool air from the central air conditioner throughout a home. They can result in up to 75 percent less energy used than standard fan motors.

ECM efficiency was marketed to customers and contractors through:

- Bill inserts targeted at residential customers
- *Guide to programs and services* sent to contractors
- Program information on the home page at www.otpco.com
- Training material covered with service representatives in annual and monthly training

Otter Tail provides customers a $100/unit rebate when contractor installed.

The ECM Program has been approved for continuation in the 2015 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Electronically Commutated Motors	**Actual**	**Proposed**	**% of Goal**
Participation	40	120	33%
Budget $	$9,091	$35,000	26%

Evaluation Methodology

Energy savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

ENERGY AND DEMAND RESULTS – 2014	
Electronically Commutated Motors	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	31,328
Demand Savings – kW	2.829

ENERGY FEEDBACK

The Energy Feedback program was 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"). These behavior-based energy savings programs aim to maximize energy savings achieved through behavior changes that result from providing customers comparative energy use information.

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 "My Energy" home energy profile tool, into 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 and are presented options 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:

- Company website including hero-spot ads presented on the home page for four months, a program page, and a demo tool within the website.
- Messaging included on service statements during one billing period.
- Bill inserts sent three times to all residential customers.
- Customer service guide sent to all new customers.
- Online services brochure sent to all new customers.
- *Guide to programs and services* sent to contractors.
- Articles in *Customer Connection*, the Company's bimonthly newsletter.
- Lobby signs in company office entries displayed for two months
- 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 2014.

Participation in the program is defined as any Minnesota residential customer that received one or more personalized Home Energy Report during 2014.

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 changes over time.
- Targeted energy efficiency tips selected based on the home's energy use pattern and season, and household heating type.

PARTICIPATION AND BUDGET – 2014			
Energy Feedback	**Actual**	**Proposed**	**% of Goal**
Bill Analyzer Participation	2,829	1,500	41%
OPower HER Participation	31,425*	31,000	101%
Budget $	$323,243	$370,600	87%

*In 2014, Opower Home Energy Reports were inadvertently sent to fourteen Otter Tail customers not located in MN. Otter Tail has excluded these participants and their energy and demand savings in all evaluations and tables.

Evaluation Methodology – Bill Analyzer

Annually since 2010 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. 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.

In 2014 the evaluation demonstrated an average 692 kWh per year as measured at the meter, based on 2,829 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 2014 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 Power Company'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.

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 2014 totaled 5,103 MWh, equal to an average 162 kWh per participant household.

Overall adjusted energy savings associated with the Bill Analyzer program in 2014 totaled 1.958 MWh, equal to an average 692 kWh per participant household for 2014.

In accordance with the Decision of the Minnesota Division of Energy Resources ("DER"), these full savings are used in calculating the net benefits and cost effectiveness of the Energy Feedback Pilot program. For 2014, the energy savings associated with behavioral change has been reduced by two-thirds in the financial incentive calculation, based on the Decision[2] by the Deputy Commissioner of the DER.

ENERGY AND DEMAND RESULTS – 2014	
Bill Analyzer	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	2,107,234
Demand Savings – kW	393.840

ENERGY AND DEMAND RESULTS – 2014	
Home Energy Reports	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	5,490,423
Demand Savings – kW	1,026.156

ENERGY AND DEMAND RESULTS – 2014	
Energy Feedback Combined Results	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	7,597,657
Demand Savings – kW	1,420.00

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 2014 units were required to meet an Energy Star qualification. This Program is included in the 2015 CIP with efficiency requirements that will again match the minimum

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

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
- Bill messages included on 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 rebate pages described within the Company's web site

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

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Geothermal Heat Pumps (R)	**Actual**	**Proposed**	**% of Goal**
Participation	41	43	95%
Budget $	$153,490	$143,000	107%

To increase participation Otter Tail Power Company increased rebates for 2015 for geothermal heat pumps from $600/ton to $800/ton. We are anticipating the increase in the rebate amount will drive customers to install an efficient geothermal heat pump.

Evaluation Methodology

An engineering analysis was used to determine energy savings for each geothermal heat pump system installed. The engineering analysis is consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

Otter Tail recognizes 21,550 kilowatt-hours of energy savings at the generator, based on an actual installed average size residential geothermal heat pump unit of 4.95 tons, including both summer cooling and winter heating savings. Demand savings are approximately .52 kW for

summer coincident peak savings per unit at the generator.

ENERGY AND DEMAND RESULTS – 2014	
Geothermal Heat Pumps (R)	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	883,557
Demand Savings – kW	21.257

In compliance with the November 5, 2010 Final Decision in the 2011-2013 Triennial filing[3], 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 2014 CIP.

HOME INSULATION

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

Otter Tail promoted the Insulation Program through:

- Bill inserts sent to all residential customers in the months of February, May, August, and December.
- Radio campaign during February.
- Program information was included as part of the Company's web site.
- 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 at the in the 2015 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Home Insulation	**Actual**	**Proposed**	**% of Goal**
Participation	31	55	56%
Budget $	$30,476	$56,000	54%

We will continue to offer increased incentives and seek additional marketing channels to drive increased participation in 2015.

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

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.

Energy savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

ENERGY AND DEMAND RESULTS – 2014	
Home Insulation	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	181,640
Demand Savings – kW	0.00

HOME TRANSFORMER

The Home Transformer program aims to identify and assist customers in reducing energy loss and waste in their home and to save energy and money through efficiency improvements.

Through the program, selected high use and/or electric heating customers were offered an energy audit and installations of select energy-efficiency products. To gage customer commitment to follow through on audit recommendations, they were charged a nominal fee for a bundle of products and services that included:

- An energy audit, a blower door test, and thermal imaging analysis
- A detailed report on audit findings, including recommendations for energy saving measures (recommendations included estimated costs, annual savings, and simple payback).
- Efficiency products, installation demonstration, and education.
    - Electric measures – CFL light bulbs of various wattages, car timer
    - Heating and cooling measures – exterior door sweep, outlet gaskets, caulking, weather-stripping for windows
    - Hot water measures – pipe insulation, low-flow showerheads and faucet aerators, temperature assessment and setback of water heater

A community action agency was hired to deliver the audits and complete the direct installs. Customers on our Residential Demand Control Rate were targeted as most of them would have primary electric heat and electric water heating. We also targeted customers with high average energy usage of at least 1500 kwh/month.

Through initial mailings approximately 550 customers were contacted. Due to low response rates program materials and pricing were redesigned. The customer cost was reduced from $100 to $89 and an incentive of a $50 Visa gift card was included to those who signed up for both the

Home Transformer program and our Cool Savings program. The new offering was extended to an additional 1,800 electric heating customers and personal follow-up phone calls were made to some customers who received the offer.

The program ended the year with only 34 participants out of approximately 2,350 targeted customers.

For 2015 Otter Tail has again modified the program design in an effort to drive greater participation.

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Home Transformer	**Actual**	**Proposed**	**% of Goal**
Participation	34	125	27%
Budget $	$52,218	$60,000	87%

Evaluation Methodology

Energy savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

ENERGY AND DEMAND RESULTS – 2014	
Home Transformer	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	88,634
Demand Savings – kW	4.895

SCHOOL KITS

The School Kit program offered energy efficient items and educational materials to sixth through eighth grade students at a local middle school. Students were asked to take the kit home and share it with their parents. The families were asked to install the items contained in the kit and to report back about their actions. Otter Tail joined forces with Great Plains Natural Gas and Lake Region Electric Cooperative (Great River Energy) in order to ensure that all students in the school could be served. The school administration was enthusiastic in supporting the program.

The Company purchased the kits through competitive bids. The kits included: an energy saving shower head and faucet aerators, a car timer, three 13watt and three 23 watt CFLs, 1 LED bulb along with information regarding the products and installation instructions. The boxed kits were delivered to all students in 18 classrooms with a short Company presentation on the products, why they were included in the kit, and why conservation is important to all.

A survey was sent home with students to gather details on home energy providers, fuels, and installation of the kit items with responses due back within one week. Survey results were used to verify installations and determine which utility would claim the savings for each item in the kit. As an incentive for the students, the classroom with the highest percentage of returned surveys was awarded a pizza party. The pizza party was a terrific motivator as 100% of surveys were returned by one eighth grade class. All classes had high return rates and the teachers, principal, and students all seem to appreciate the program.

No promotion outside of the school was done for this program.

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
School Kits	**Actual**	**Proposed**	**% of Goal**
Participation	1,252	1,275	98%
Budget $	$25,460	$24,000	106%

Evaluation Methodology

Energy and demand savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

ENERGY AND DEMAND RESULTS – 2014	
School Kits	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	337,657
Demand Savings – kW	24.579

WATER HEATING STORE & SAVE
(Residential)

Controlled water heating storage is one of Otter Tail's largest residential direct load management programs. The program gives participating customers bill discounts in exchange for allowing the Company to reduce their water heating energy use during peak and high energy price periods. During a control event water heaters are interrupted entirely for the duration of the control period, which can occur at any time of the year.

Water heaters were controlled approximately 383 hours in 2014 over approximately 116 different days.

Promotion of the program was done through bill inserts, bill messages, return envelope spots, through the Company's website, brochures, customer service representatives, personal contacts, and the contractor guidebook.

Participation & Budget

Otter Tail initially filed the Water Heating Store & Save program with 100 percent residential participation. In May of 2014, Otter Tail notified DER Staff that the program has a ratio of 93 percent residential and 7 percent commercial. Otter Tail has included participation data for both classes in this section of the Status Report.

PARTICIPATION AND BUDGET – 2014			
Water Heating Control	**Actual**	**Proposed**	**% of Goal**
Participation	14,026	8,622	163%
Budget $	$9,264	$40,000	23%

Evaluation Methodology

Energy savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

ENERGY AND DEMAND RESULTS – 2014	
Water Heating Control (R&C)	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	348,187
Demand Savings – kW	3,215.786

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 Power Company 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
- Directly to potential program participants in the educational sector at the annual Minnesota School Board Association conference
- 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.otpco.com
- Through Otter Tail's Commercial Advertising and Education program targeting agricultural producers and processors

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Adjustable Speed Drives	**Actual**	**Proposed**	**% of Goal**
Participation	150	135	111%
Budget $	$435,839	$340,400	128%

Evaluation Methodology

Engineering estimates are used to determine energy savings from each adjustable speed drive system installed. Energy and demand savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

The Company utilizes engineering calculations that are based on methodologies developed by the Electric Power Research Institute for fan- 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 – 2014	
Adjustable Speed Drives	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	5,647,505
Demand Savings – kW	899.453

AIR CONDITIONING CONTROL

The CoolSavings air conditioning control program targets small commercial customers in MN with central air conditioning systems. Customers are encouraged to enroll in the program and receive a bill credit of $5 per ton of connected load for each summer month (June-September).

Otter Tail Power Company 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

Nineteen customers enrolled in the program in 2014, for a total of 39 air conditioning units averaging 3.65tons per unit.

In 2014, Otter Tail controlled air conditioning 27 days, totaling 48 hours and 37 minutes. This control time is within the 300-hour control limit in the air conditioning rider.

PARTICIPATION AND BUDGET – 2014			
Air Conditioning Control (C)	**Actual**	**Proposed**	**% of Goal**
Participation	39	40	98%
Budget $	$10,068	$34,000	30%

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. Current energy and demand savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

ENERGY AND DEMAND RESULTS – 2014	
Air Conditioning Control (C)	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	2,110
Demand Savings – kW	94.589

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 2014, Otter Tail relied on Energy Star qualifications as the minimum equipment efficiency requirement. The program is included in the 2015 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 Power Company 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
- Directly to potential program participants at the annual Minnesota School Board Association conference
- 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

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Air Source Heat Pumps (C)	**Actual**	**Proposed**	**% of Goal**
Participation	55	131	42%
Budget $	$38,739	$68,000	57%

To increase 2015 participation, the Company increased rebates for ASHP from $240/ton to $400/ton. The Company anticipates the increased rebate amount will drive customers to install an efficient ASHP.

Evaluation Methodology

An engineering analysis was used to determine energy savings for each air source heat pump system installed. The engineering analysis is consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

Otter Tail recognizes 7,452 kilowatt-hours of energy savings, based on an actual average installed size commercial air source unit of approximately 2.10 tons, including summer and winter energy savings as approved in Otter Tail's 2014-2016 Triennial Filing. Demand savings are approximately 0.080 kW at the generator for peak savings per unit.

ENERGY AND DEMAND RESULTS – 2014	
Air Source Heat Pumps (C)	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	409,884
Demand Savings – kW	4.393

In compliance with the November 5, 2010 Final Decision in the 2011-2013 Triennial filing[4], 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 2014 CIP.

COMMERCIAL DESIGN ASSISTANCE

The Commercial Design Assistance Program offers building owners, architects, 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 that 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
- Directly with potential program participants in the educational sector at the annual Minnesota School Board Association conference.
- Bill messages included on all customer statements
- Program, rate, and rebates described within the Company's web site
- Through the program consultant's network, membership, and participation as professionals in architectural and engineering organizations, including ASHRAE, AIA, and IES

PARTICIPATION AND BUDGET – 2014			
Commercial Design Assistance	**Actual**	**Proposed**	**% of Goal**
Participation	2	6	33%
Budget $	$214,451	$490,500	44%

The Commercial Design Assistance program was new to Otter Tail's CIP with the Company's

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

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 eventually reaching the measurement and verification stage of six projects in 2013 and in each year following. The project lifecycle has evolved close to Otter Tail's original projections. However, due to the random nature of the construction process along with the length and timing of project startups and completions, only two Commercial Design Assistance projects reached construction completion and the resulting measurement and verification stages in 2014. Otter Tail anticipates completion and verification of up to nine or more projects in 2015.

ENERGY AND DEMAND RESULTS – 2014	
Commercial Design Assistance	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	361,875
Demand Savings – kW	102.302

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 2015 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 2015 CIP with efficiency requirements that will again match the minimum Energy Star requirements below:

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

Otter Tail Power Company 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
- Directly with potential program participants in the educational sector at the annual Minnesota School Board Association conference.

- 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.otpco.com

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Geothermal Heat Pumps (C)	**Actual**	**Proposed**	**% of Goal**
Participation	4	35	11%
Budget $	$62,871	$122,000	52%

To increase participation Otter Tail Power Company increased rebates for 2015 for geothermal heat pumps from $600/ton to $800/ton. We are anticipating the increase in the rebate amount will drive customers to install an efficient geothermal heat pump.

Evaluation Methodology

An engineering analysis was used to determine energy savings for each geothermal heat pump system installed. The engineering analysis is consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

Otter Tail recognizes 31,329 kilowatt-hours of energy savings at the generator, based on an average size commercial geothermal heat pump unit of 7 tons, including both summer cooling and winter heating savings. Demand savings are on average 0.52 kW for summer peak coincident savings per unit at the generator.

ENERGY AND DEMAND RESULTS – 2014	
Geothermal Heat Pumps (C)	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	125,318
Demand Savings – kW	2.067

In compliance with the November 5, 2010 Final Decision in the 2011-2013 Triennial filing[5], 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 2014 CIP.

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

GRANTS (CUSTOM PROJECTS)
The Grants Program offers customized incentives to commercial and industrial customers for conservation and efficiency improvements.

In 2014, Otter Tail analyzed a variety of customer-submitted grant projects with 37 of these projects approved for incentives.

Grant Custom Projects	Quantity
Automation	12
Building Envelope	10
Compressed Air System	2
Cooling	2
Lighting	2
Process Improvements	2
Production Equipment	2
Refrigeration System	4
Variable Speed Drive	1
Total	37

The Company believes that its Advertising and Education segmentation strategy and focus on building envelope improvements leads to increased participation in the Grant Program. Typically building envelope upgrades are difficult for customers to cost-justify, and this focus improved the awareness of grant funding for customers contemplating building envelope upgrades.

Otter Tail Power Company 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
- Directly with potential program participants in the educational sector at the annual Minnesota School Board Association conference
- Through Otter Tail's Advertising and Education campaign targeting agricultural processors, producers, and customers with intense commercial refrigeration loads
- Program, technology, and rebate information available on the Company's web site at www.otpco.com
- *Make It Electric* newsletter for commercial and industrial customers

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Grants	**Actual**	**Proposed**	**% of Goal**
Participation	37	38	97%
Budget $	$340,395	$721,000	47%

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 measurement and verification of large grant projects that meet the protocol criteria.

In 2014, Otter Tail filed a formal measurement and verification plan for custom efficiency measures completed as part of the Industrial Focused Efficiency program.

Energy Savings & Adjustments

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

ENERGY AND DEMAND RESULTS – 2014	
Grants	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	2,037,200
Demand Savings – kW	466.409

The Grant program is included in Otter Tail's 2015 CIP.

INDUSTRIAL FOCUSED EFFICIENCY

The Industrial Focused Efficiency program targets large industrial customers with potential for improvements in production processes, end-use efficiency, and energy management practices. The program uses a proactive approach to benchmarking energy management practices and identifies specific opportunities for efficiency improvements in large industrial facilities. The industrial sector is a significant consumer of electricity with abundant opportunities for improvements in energy management practices and implementation of energy efficiency upgrades. In 2014, Otter Tail's largest customers accounted for just 1.2 percent of all Minnesota accounts, yet accounted for nearly half of retail energy sales. In the same time period, the Energy Information Administration reported that the industrial sector accounted for 25 percent of U.S. retail electricity consumption, with projected increases in industrial consumption of an additional 1.9 percent in 2015 and 1.3 percent in 2016.

Implementation of the Industrial Focused Efficiency program consists of the following strategies:

1. Proactive project identification
   Otter Tail considers both customer engagement and energy savings potential in screening potential participants. The program focuses on customers with savings potential of 250,000 kWh or greater, typically requiring annual consumption of 5,000,000 kwh or more. Engaged customers bringing enthusiastic management and employee teams to the table are more likely to pursue the most cost effective energy savings behaviors and options.

2. Energy management benchmarking
   For qualifying customers, Otter Tail funds the Envinta One2 Five energy management benchmarking analysis. The benchmarking session focuses on management practices related to energy efficiency by incorporating customer participation from across the organization.

3. Project identification
   Forming an engaged and knowledgeable energy management team is imperative to identifying efficiency opportunities on the customer site. To facilitate identification of efficiency measures, Otter Tail funds 50 percent of engineering studies needed to identify and evaluate energy savings opportunities. Possible efficiency measures include lighting, motors and drive systems, process efficiency improvements, refrigeration systems, compressed air systems and custom efficiency projects.

4. Project implementation
   Working in tandem with the customer's representation on the energy management team, Otter Tail develops a schedule of efficiency measures with bonus incentives provided in exchange for the participant's completion of all measures before established deadlines. Efficiency measures might include projects traditionally accounted for under Otter Tail's prescriptive rebate programs, but Otter Tail attributes energy savings for each efficiency measure to the Industrial Process Efficiency program.

5. Measurement and verification
   Otter Tail follows the Measurement and Verification Protocols for end-use efficiency projects meeting the formal measurement and verification requirements established by the Minnesota Department of Commerce—Division of Energy Resources.

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Industrial Process Efficiency	**Actual**	**Proposed**	**% of Goal**
Participation	1	1	100%
Budget $	$248,292	$85,000	292%

A single industrial customer participated in the Industrial Process Efficiency program in 2014 completing the following required actions:

1. Formation of a facility energy management team with representation from Otter Tail Power Company and leadership from an independent, third party energy management consultant.
2. Completed Envinta One2Five energy management benchmark with participation from customer's executive management group and energy management team
3. Completed an onsite engineering study identifying end-use energy efficiency opportunities
4. Analyzed and evaluated cost effectiveness and any possible production impacts of energy efficiency measures identified in the engineering study
5. Together with Otter Tail, identified bonus incentive levels needed to prioritize capital-intensive energy efficiency projects for completion in 2014.

The customer concluded 2014 activities by implementing efficiency measures in lighting, compressed air, motor and drive, chiller and ice storage systems.

Evaluation Methodology

Otter Tail developed energy savings estimates through both established methodologies for prescriptive measures and also through engineering calculations for custom measures implemented by the customer. Together, energy savings for all measures implemented totaled over one million kWh which triggered Otter Tail to follow DER Measurement and Verification Protocols for Large Custom Projects for the 2014 Industrial Focused Efficiency project.

Measure	**Evaluation methodology**
Lighting retrofit	Prescriptive model
Lighting, new construction	Prescriptive model
Compressed air	Custom savings calculations
V-belt to cogged belt retrofits	Custom savings calculations
VFD's on pumps	Prescriptive model
Chiller replacement with ice storage system	Custom savings calculations

Energy Savings & Adjustments

ENERGY AND DEMAND RESULTS – 2014	
Industrial Process Efficiency	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	2,516,836
Demand Savings – kW	660.668

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 (HID) 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
- Directly with potential customers in the educational sector at the annual Minnesota School Board Association conference
- Through Otter Tail's commercial Advertising and Education campaign targeting agricultural producers and processors and customers with intense commercial refrigeration loads
- *Guide to Programs and Services* sent to contractors.
- Program, technology, and rebate information available on the Company's web site
- Make it Electric newsletter for commercial and industrial customers
- Direct mail campaigns targeting nearly all commercial and industrial customers as well as electrical contractors

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 – 2014			
Lighting	**Actual**	**Proposed**	**% of Goal**
Participation	582	346	168%
Budget $	$1,252,180	$563,000	222%

Otter Tail increased incentives by 50 percent for hard-wired LED retrofit measures through the fourth quarter of 2014. The added incentive provided a boost in participation and helped increase market penetration of LED retrofits in commercial and industrial applications.

Evaluation Methodology

Engineering analysis, survey data, and the 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. The engineering analysis is consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

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 – 2014	
Lighting	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	8,090,987
Demand Savings – kW	2,009.035

The Lighting Retrofit program is continued in Otter Tail's 2015 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 Power Company 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
- Directly with potential customers in the educational sector at the annual Minnesota School Board Association conference
- Through Otter Tail's commercial Advertising and Education program targeting agricultural producers and processors and customers with intense commercial refrigeration loads
- Program, technology, rebate information available on the Company's web site at www.otpco.com
- Personal consultations between program implementation staff and customers

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Lighting – New Construction	**Actual**	**Proposed**	**% of Goal**
Participation	128	202	63%
Budget $	$125,698	$143,000	88%

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 – 2014	
Lighting – New Construction	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	2,170,324
Demand Savings – kW	495.137

This Program is continued in the 2015 CIP.

MOTORS

The goal of the 2014 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 Motors 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 Power Company 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
- Directly to potential participants in the educational sector at the annual Minnesota School Board Association conference
- Through the commercial Advertising and Education campaign targeting agricultural producers and processers and customers with intense commercial refrigeration loads
- 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

Participation in the 2014 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 2014, Otter Tail was encouraged to hear continued anecdotal reports from staff that availability of motors exceeding NEMA Premium efficiency is increasing.

This Program is continued in the 2015 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Motors	**Actual**	**Proposed**	**% of Goal**
Participation	161	71	227%
Budget $	$165,384	$81,000	204%

Motor Types Rebated	
New / replace non-operating	37
Replace operating	124
Total Motors Rebated	161

Evaluation Methodology

Otter Tail Power Company 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 TRM. 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 TRM 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 2015 CIP.

ENERGY AND DEMAND RESULTS – 2014	
Motors	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	607,146
Demand Savings – kW	155.090

PC POWER SUPPLY

The PC Power Supply Program unites electric utilities, the computer industry, and consumers in an effort to bring more efficient technology to the marketplace. The program provides manufacturer incentives for certain qualifying energy efficient computer and server product categories and is intended to accelerate market adoption for products within each of these categories that meet ENERGY STAR and 80 Plus product efficiency specifications.

A third party program management and implementation specialist works directly with PC manufacturers with program outreach efforts and incentives for integrating qualifying power supplies into various manufacturers' computer products. The third party provides Otter Tail with a monthly report with details on the quantity and measure type of each PC power supply as featured in Otter Tail's approved 2014—2016 triennial CIP filing.

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
PC Power Supply	**Actual**	**Proposed**	**% of Goal**
Participation	1,148	3,562	32%
Budget $	$16,268	$67,000	24%

Participation in the PC Power Supply program was about one-third of projected goals. When developing original participation forecasts, Otter Tail's program implementation consultant attempted to account for expected unit deliveries based on the population proportion of business accounts to residential accounts similar to other regions supporting the PC Power Supply program. Typically, program participation will be higher in territories with more commercial accounts. It is very likely that there is a lower concentration of business accounts in Otter Tail's

service territory than in the average territory of utilities supporting the PC Power Supply program. This trend would explain the 2014 results of lower participation in the program than expected.

Evaluation Methodology

Reported energy and demand savings are based on actual measure quantities and types as reported by Otter Tail's third party program specialist. Energy and demand savings for this program are based on Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

In September 2014, Otter Tail notified DER staff of a new measure for this program. The new measure is called, Energy Star Server 80 Plus Gold. This measure is for an energy efficient premium Server. Consistent with the other approved PC Power Supply measures we assumed 4,160 hours of annual operation and a four year measure life. Along with the other four measures in this program, the third-party implementation partner supplies the energy savings and costs. Otter Tail included the energy and demand savings for this measure along with an updated Attachment B: Electric Product Assumptions to DER staff in September 2014. DER staff accepted this addition to the program.

Energy Savings & Adjustments

ENERGY AND DEMAND RESULTS – 2014	
PC Power Supply	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	184,989
Demand Savings – kW	43.131

RECOMMISSIONING

The Recommissioning/Retrocommissioning ("RCx") program provides incentives to qualifying commercial customers to complete RCx studies and implement cost effective, energy savings measures. The *Energy Star Building Manual* defines commissioning as the process of ensuring that systems are designed, installed, functionally tested, and capable of being operated and maintained to the owner's operational needs.

- Retrocommissioning is the systematic process applied to existing buildings that have never been commissioned to ensure that their systems can be operated and maintained according to the owners' needs.

- Recommissioning is the term used for applying the process to a building that has been commissioned previously (either during construction or as an existing building).

Potential participants must complete a pre-approval application form prior to initiating any RCx projects to be assured of eventual study funding from Otter Tail. Not all buildings and building types are ideal candidates for achieving energy savings through traditional RCx efficiency

measures. The pre-approval process increases the likelihood that customers with buildings and building types with the best RCx opportunities capitalize on the RCx process.

Building tune-ups, RCx Lite, and building optimization all refer to an evolution of the traditional RCx process. The approach starts by targeting the most common RCx measures with the highest chances of returning payback on operations and maintenance improvements. Often, these operation and maintenance improvements are associated with advanced control strategies. Engineering firms completing RCx Lite studies are often capable of identifying these measures through spot inspections and direct digital control systems without the added costs of seasonal monitoring and functional performance testing done in formal RCx studies. Consequently, the RCx Lite process can identify up to 75 percent percent of the savings of a more formal RCx study at about 25 percent of the cost.

Otter Tail's RCx program proposes a tiered approach to delivering RCx services. The RCx Lite tier provides incentives for building tune-ups, where the RCx tier incentivizes customers to implement formal RCx studies with more expansive measures.

Otter Tail's program model relies on industry engineering firms to provide RCx services to potential participants in the program.

Otter Tail Power Company promotes the RCx 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
- Through brochures and literature explaining the RCx process and program
- Directly with customers in the educational sector at the annual Minnesota School Board Association conference
- Personal consultations between program implementation staff and customers
- Program, technology, and rebate information available on the Company's web site at www.otpco.com

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Recommissioning	**Actual**	**Proposed**	**% of Goal**
Participation	0	10	0%
Budget $	$26,210	$272,000	10%

Otter Tail's program model relies on industry engineering firms to provide RCx services to potential participants in the program. In an effort to reach out to potential RCx service providers in 2014, the Company offered free program training for potential RCx service providers and experienced minimal interest.

Otter Tail is currently offering an additional new program concept with a turn-key service provider through three separate RCx projects. All projects are currently in the screening or study implementation process with study findings due from April through August of 2015. Preliminary screening of potential projects for energy savings potential is encouraging and the Company is optimistic about the alternative program model. Otter Tail notified DER staff of this informal modification to the RCx program concept in April of 2014.

Otter Tail continues to offer the initial RCx program and incentives to eligible customers that are interested in pursuing this option.

Evaluation Methodology

The RCx program process includes the following steps. The Study Review (Step 3) specifically discusses evaluation activities taking place in the RCx process.

1. **Study pre-approval**
   Otter Tail requires that all potential RCx program participants complete a study pre-approval application form. Otter Tail reviews the application along with the applicant's building energy use history to determine if the proposed RCx project is likely to return adequate energy savings. The pre-approval form also notifies the potential participant's engineering firm of the study requirements needed for the participant to receive Otter Tail's approval and future study incentives funding.

2. **Study completion**
   Once Otter Tail notifies the customer of the study pre-approval, the customer's engineering firm completes the draft RCx study.

3. **Study review**
   Otter Tail, together with a third party engineering consulting firm, reviews the study for accuracy of calculations, assumptions, and inclusion of all required RCx study requirements. The third party engineering firm does not provide direct RCx services for customers or compete with engineering firms providing these services. Otter Tail works with the customer and the customer's engineering firm as needed to assure engineering calculations, assumptions, and the study all meet the Company's RCx program requirements.

4. **Implementation**
   The customer submits a final RCx study rebate application, along with documentation of completing all measures with a payback of one year or less and a capital cost of $5,000 or less to receive RCx study rebate funding per program guidelines.

Energy Savings

ENERGY AND DEMAND RESULTS – 2014	
Recommissioning	**At the Generator (DSMore Summer 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 Power Company 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
- Specialized contractor information kits provided for refrigeration contractors
- Follow-up with personal contractor contacts
- Focused, personal contacts targeting grocery and convenience stores and other facilities with intensive refrigeration loads.

This Program is included for continuation in Otter Tail's 2015 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
Refrigeration	**Actual**	**Proposed**	**% of Goal**
Participation	89	119	75%
Budget $	$189,112	$170,000	111%

Evaluation Methodology

Otter Tail Power Company used Minnesota's TRM for the Refrigeration program efficiency measures. 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 TRM 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 savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

ENERGY AND DEMAND RESULTS – 2014	
Refrigeration	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	1,240,938
Demand Savings – kW	215.433

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 2014			
Installed measures	**Owners**	**Renters**	**Total**
Audit	98	1	99
Attic Insulation Materials	10	0	10
Compact Fluorescent Lamp	1,026	12	1,038
Door Maintenance Materials	4	0	4
Engine Heater Timer	109	0	109
Exterior Wall Insulation Materials	5	0	5
Faucet Aerator	157	0	157

Foundation Insulation Materials	5	0	5
Freezer	13	0	13
Low-flow Showerhead	65	0	65
Pipe Insulation	16	0	16
Refrigeration	40	0	40
Water Heater	17	0	17
Water Heater - Reduce Temperature	14	0	14
Water Heater--Controlled Ser. Rate	5	0	5
Weatherization	11	0	11

House Therapy -- Owner / Renter Detail - 2014				
	CAP Spending	**Percent**	**Participation**	**Percent**
Owners	$109,437	100%	99	99%
Renters	$136	0%	1	1%
Total	$109,573	100%	100	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.

Otter Tail Power Company promotes House Therapy using various resources.

- A residential bill insert
- Part of the environment disclosure insert posted on our website annually
- Part of the Company's website listing the program and each of the agencies that implement the program

This Program has been approved for continuation in the 2015 CIP.

Participation & Budget

PARTICIPATION AND BUDGET – 2014			
House Therapy	**Actual**	**Proposed**	**% of Goal**
Participation	100	160	63%
Budget $	$142,588	$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 2014 the TRM was used for many of the additional House Therapy components. Where TRM were not available, engineering estimates were used. Energy and demand savings for this program are consistent with Attachment B: Electric Product Assumptions, approved in the Company's triennial plan.

Energy Savings & Adjustments

Weatherization is an average of wall, sealing, and attic insulation savings. 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	53
Engine Block Timer	244
Aerators, Showerhead, Pipe-wrap	895
Water Heater Temp Set-Back	141
Refrigerator Remove & Replace	492
Freezer Remove & Replace	776
Water Heater Replace	195

ENERGY AND DEMAND RESULTS – 2014	
House Therapy	**At the Generator (DSMore Summer Coincident Peak kW)**
Energy Savings – kWh	204,930
Demand Savings – kW	21.406

INDIRECT IMPACT PROJECTS / REGULATORY REQUIREMENTS

ADVERTISING & EDUCATION – Residential & Commercial

Advertising & Education – Residential

The Advertising & Education Program for 2014 targeted Minnesota residential customers and students with reinforcing messages to make conserving energy a lifestyle. Three approaches were used:

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

Advertising

One television and three radio campaigns were run targeting residential customers during 2014. 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 radio and web promotion 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 supports development of online resources to promote participation in other energy efficiency programs in the CIP portfolio. Data is collected from web analytic tools used on the company websites. Minnesota customer web participation is calculated as 45 percent of the unique visitor count to the website material. This represents the portion of Company customers that are located in Minnesota.

Web resources are provided online at www.conservingelectricity.com and at www.otpco.com. Materials include information on energy efficient technology, Energy Star appliances, energy tax credits, energy saving tips, energy efficient home insulation and weather stripping, appliance usage charts, and CIP program details.

Home page hero ads placed on www.otpco.com promoted CIP programs including CoolSavings air-conditioning cycling program, appliance recycling program, air-source heat pump program, and home insulation. Traffic generated as a click-through to the program details was tracked as participation resulting from these ads.

A YouTube video series continued to be presented to customers focused on home insulation and maintenance topics:

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

Classroom presentations

The Science Museum of Minnesota conducted an interactive lyceum program reaching Minnesota schools over 20 days during October and November, 2014. 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 Power Company service territory over a three year period. Participation is dependent on school administrators requesting the program. During the 2014 tour 2,071 students participated in the lyceums. 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 2015 CIP.

2014 A&E Detailed Participation	
Science Museum School Tour	2,071
Web visits tied to advertising spots	5,217
YouTube videos	4,509
Web visits to ConservingElectricity.com	38,010
Total	49,807

PARTICIPATION AND BUDGET – 2014			
Advertising & Education	**Actual**	**Proposed**	**% of Goal**
Residential Participation	49,807*	10,000	498%
Budget $	$116,647	$150,000	78%

*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.otpco.com has increased significantly from past years.

Advertising and Education – Commercial

Agricultural Process Efficiency and Commercial Refrigeration
Achieving energy efficiency goals from the Next Generation Energy Act requires a more intensive market segmentation strategy. Past efforts in segmentation have included:

1) Focus on savings opportunities in the government and healthcare sectors
2) Educational campaigns on green buildings strategies, including Energy Star, Green Globes and LEED
3) Campaigns to educate customers with large commercial refrigeration loads on efficiency and energy savings opportunities

For 2014, Otter Tail's segmentation strategy included customers in the agricultural production and processing sectors and facilities with intense commercial refrigeration loads (convenience stores; retail grocery, liquor, and meats; and refrigerated storage facilities).

A recovering agricultural economy presents opportunities for both agricultural processors and producers to make significant investments in all aspects of their business operations, including energy efficiency upgrades. In other market sectors, refrigeration loads greatly add to business'

energy intensity values, making businesses operating with significant refrigeration loads excellent targets for investments in technologies to reduce energy consumption.

Otter Tail reached out to the agricultural sector through free on-site energy efficiency assessments for interested agricultural producers and processors. The Company relied on personal contacts from energy management representatives with dairy, poultry, swine, and crop producers as well as agricultural processors in crop storage and fertilizer production. Interested customers received a free on-site assessment from a third party engineering firm along with a follow-up report with details on energy savings and available incentives from Otter Tail for potential efficiency measures.

In the commercial refrigeration sector, Otter Tail provided refresher training for internal program implementation staff on commercial refrigeration fundamentals and energy efficiency opportunities in commercial refrigeration systems. After the training session, Otter Tail staff consulted a list of potential refrigeration segment participants generated from Otter Tail's customer information systems and scheduled on-site, personal assessments with interested customers.

An additional strategy of the Advertising & Education Program for 2014 targeted Minnesota commercial customers through a radio campaign, *More than ever before*, that promoted the numerous opportunities for energy and operational savings available to business customers through the multitude of conservation programs and incentives available. The ad was also used to raise awareness and drive participation in the CIP commercial program portfolio.

2014 A&E – Commercial Customer Visits			
	Actual	**Goal**	**% of Goal**
Ag sector	14	10	140%
Commercial Refrigeration	25	0	N/A
Total	39	10	390%

Otter Tail was pleased with program participation and results. Assessments completed for customers in the agricultural sector identified 1.4 million kWh of energy savings potential. Commercial refrigeration assessments identified nearly 2.6 million kWh of energy savings and 385 kW of demand savings potential, with 1.2 million kWh of savings from potential measures with a payback of two years or less.

Otter Tail plans to build off of 2014 successes by again reaching out to the agricultural production and processing segments and to customer segments with intense commercial refrigeration loads in 2015. The Company has also tracked energy savings potential for 2014 participants and will reach out to these customers again 2015.

ACTUAL / BUDGET – 2014			
Advertising & Education	**Actual**	**Proposed**	**% of Goal**
Commercial Budget $	$30,683	$25,000	123%

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 2015 CIP.

PARTICIPATION AND BUDGET – 2014			
Compressed Air Audits	**Actual**	**Proposed**	**% of Goal**
Participation	3	4	75%
Budget $	$22,503	$20,000	113%

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 2014. Customers are given a choice between rebates and financing.

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

- *Taking Care of Business* commercial CIP booklet
- *Guide to programs and services* available to contractors
- Program brochures included with materials requests to customers
- Part of the Company's web site
- Lobby signs in local Customer Service Centers

2014 Financing Details by Customer Class			
	Residential	**Commercial**	**Total**
Participation Goal	7	5	12
Participation Actual	0	0	0
% of Goal	0%	0%	0%
Budget Goal	$13,000	$32,000	$45,000
Budget Actual	$5,408	$5,408	$10,817
% of Goal	42%	17%	24%

This Program has been approved for continuation in the 2015 CIP.

Although 2014 had no participants 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.

2014 Implementation & Training Details by Customer Class			
	Residential	**Commercial**	**Total**
Participation Goal	175	250	425
Participation Actual	74	408	482
% of Goal	42%	163%	113%
Budget Goal	$40,000	$60,000	$100,000
Budget Actual	$48,166	$55,352	$103,518
% of Goal	120%	92%	104%

This Program has been approved for continuation in the 2015 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 2014, 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. The 2014-2016 CIP plan continues work on this system, which is now operating as our rebate processing and data tracking tool. Continuing work includes adding new programs, development of management dashboards, and reporting tools for program management.

This Program has been approved for continuation in the 2015 CIP.

BUDGET – 2014			
CIP Development	**Actual**	**Proposed**	**% of Goal**
Planning – Regulatory Affairs	$283,664	$300,000	95%
Research & Development	$8,962	$150,000	6%

REGULATORY REQUIREMENTS

PUC ASSESSMENTS / REGULATORY (NGEA) ASSESSMENTS

PUC ASSESSMENTS / REGULATORY (NGEA) ASSESSMENTS			
	Actual	**Proposed**	**% of Goal**
PUC Assessments	$17,020	$20,000	85%
Regulatory Assessments (NGEA)	$99,988	$95,000	105%
Made in Minnesota Solar Energy Assessment	$103,909	$103,909	100%

ASSESSMENTS	
NGEA Assessment – technical assistance	$13,564
NGEA Assessment – R&D grant	$75,770
NGEA Assessment – facilities efficiency	$10,524
NGEA Assessment – Made in Minnesota Solar	$103,909
Total NGEA Assessments	**$203,766**
Direct PUC Assessments	$17,020
Total	**$220,786**

The Made In Minnesota ("MIM") Solar Energy Assessment is the only assessment associated with energy savings. Two Otter Tail customers received MIM funding in 2014. The installations were completed near the end of 2014, with only 402 total kWh produced. Otter Tail has not included the 402 kWh in the overall energy savings in Appendix A of this filing. The energy has also not been included in Otter Tail's calculation for the Company's financial incentive.

MISCELLANEOUS / INACTIVE PROGRAM COSTS

These are inactive and miscellaneous programs. The associated costs, including closing costs for these programs, were charged to the 2014 CIP tracker account. Each is detailed separately below.

ACCOUNTING ADJUSTMENTS

Two accounting adjustments were required in 2014 totaling $13,052.16

The first was to record a true up to the 2013 year end estimated billing from Wisconsin Energy Corporation for the Be Bright program reflecting a decrease in costs of ($2,187.27)

The second was to record the cost of bulbs reflected in the Be Bright program that were earmarked for non-profit organization fund raising events that were not distributed and therefore carried over into 2015.

Since 1993, Otter Tail Power Company 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.

INACTIVE PROGRAMS

TOWN ENERGY CHALLENGE PILOT

For the first time in Minnesota's history an entire town served by Otter Tail Power Company and every single residence in that community was chosen to be "On for Conservation!" Otter Tail Power Company 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 Power Company to make the entire town more energy efficient.

SC/EC (Student's for Community Energy Challenge) team continued to promote conservation at the school. Even though they did not collect Energy Pledges in 2014 they still held monthly meetings and the students went into elementary classrooms to remind them on how to save energy, had student "light savers" and "energy patrol" in elementary classrooms and coloring contests in the elementary. The team was also responsible for shutting of lights in hallways in-between classes and ran the gym lights on the energy saving method instead of having all of them on all day.

<u>Evaluation Methodology</u>

Otter Tail originally agreed to formally evaluate the Town Energy Challenge program for five years. This would include the years of 2010-2014 to be evaluated. The 2014 results mark the fifth and final year that Otter Tail will be claiming energy and demand savings from the Town Energy Challenge. Otter Tail planned to hire a third-party evaluator again for the program, but due to the high costs associated with this evaluation when compared to the relatively small

savings the Company didn't feel it was cost-justified.

In December 2014, the Company contacted DER staff with this issue. DER staff agreed the savings didn't justify a formal evaluation. The Company noted residential savings increased in 2013, while Commercial savings continued to decay. The Company and DER staff agreed that the Company could forgo a third-party evaluation and use the average savings per a customer calculated for 2013. Compared to 2013, the Company found an overall decline of 20 percent in 2014 energy savings.

RESIDENTIAL DEMAND CONTROL

The Residential Demand Control ("RDC") was originally designed to manage winter peaks. Given the summer peak emphasis in the MISO region, the RDC tariff is under evaluation and redesign. The tariff is not closed, but the company is not marketing the rate until it has been fully evaluated. Therefore, the RDC Program was discontinued in CIP. In early 2014 a rebate was paid to a customer that purchased a unit in late 2013 but wasn't installed until early 2014.

RDC costs in 2014 consisted of a customer rebate, labor costs for 2013 program evaluation, and other miscellaneous costs.

BUSINESS EDUCATION

The Building Operator Certification training program was offered through Midwest Energy Efficiency Alliance. The program is not included in the 2014-2016 CIP Triennial due to low participation.

There were no energy savings claimed in 2014 for the program, but some minimal costs are included before full close-out of the program occurred.

OTTER TAIL POWER COMPANY CIP PROJECTS

The majority of costs associated with Otter Tail CIP Projects are related to nine utility-owned buildings where energy audits were performed by a third-party auditor in 2014. These energy audits were in response to the MN Public Utility Commission's ("MNPUC") July 16, 2013, order in docket no. E,G-999/DI-12-1342. Order point four required investor-owned utilities to submit to the Department of Commerce, for its review and analysis, a scoping plan for recommissioning studies or audits on utility-owned facilities meeting appropriate requirements.

Otter Tail worked with the DER to establish types of facilities that qualified for energy audits, and who could perform the audits. It was decided that third-parties would be required to perform the energy audits. Otter Tail issued a Request For Proposals ("RFP") to several engineering firms that specialized in facility energy analysis. Once proposals were received from engineering firms, the Company sent a scoping plan to the DER that included a listing of the nine utility-owned facilities and the costs per a square foot to perform the energy audits. The DER responded to the MNPUC's order on August 5, 2014, stating that they had reviewed Otter Tail's scoping plan and that the plan met all the requirements outlined in the Department's Compliance Report and that they approved the scoping plan.

Otter Tail then selected a third-party firm and worked with them to complete the energy audits and received a full energy audit report for each building. Otter Tail is still reviewing the energy analysis and is in the planning process for implementation.

There were no energy savings claimed in 2014 for the program.

CARRYING COSTS

Charges totaled $219,788.09 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 MNPUC's September 26, 2015, order, E017/M-14-201, the monthly carrying charge has been modified on the CIP tracker-account balance to the short-term cost of debt set in the Company's last rate case, E017/GR-10-239.

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 21st 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	$0.00263	$4,835,558
2015 / 2016	$0.00287	$5,731,183

Otter Tail has included the CIP tracker, Exhibit 1, which uses the Commission approved per-kWh method from October 2015 through September 2015. For October 2015 through September 2016, Otter Tail is proposing to change the surcharge to $0.00287/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 21 month period from end of year 2014 through the end of September 2016, Otter Tail plans to reduce the CIP Tracker balance of $5,731,183 to an estimated $0, as illustrated in Table 2 below. In addition, Otter Tail estimates the following impacts to the CIP Tracker balance during the 21 month period:

- $13,955,206 of additional expenses from carrying charges, CIP incentive and CIP program expenses
- $7,541,807 collected from the CCRC
- $12,144,582 collected from the CCRA, of which $7,325,348 will be collected during the 12 months from October 2015 – September 2016

Table 2

	Jan 2015 - Sep 2015	Oct 2015 - Sep 2016
Beginning Balance	**$5,731,182.74**	**$3,653,393.30**
Carrying Charges	$19,471.16	$11,037.06
CIP Program Expenses	$2,916,135.99	$5,836,949.64
CIP Incentive Proposed	$2,957,971.80	$2,213,640.63
CCRC through Base Rates	($3,152,133.97)	($4,389,672.62)
CCRA - CIP Rider	($4,819,234.42)	($7,325,348.02)
Ending Balance	**$3,653,393.30**	**($0.01)**
CCRA Method	**$0.00263/ kWh**	**$0.00287/ kWh**

As illustrated in Exhibit 1, the proposed change in the surcharge will increase the CCRA by approximately nine percent. This increase is needed to continue to manage the outstanding CIP tracker balance. By October 1, 2016 the CIP tracker balance is projected to decrease to $0. 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 2015 and 2016 through September 2016. 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 2015 through September 2016 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 ten rate classes will receive a 9 percent increase in the proposed CCRA. However, no rate class will see a *total bill increase* greater than half of one percent. The largest monthly bill increase is for the Large General Service class, which will see an average increase of $50.71 per month or a 0.39 percent total bill increase. Otter Tail's residential customers will see an average increase of $0.20 per month.

The proposed 2014 CCRA is calculated assuming the rate is approved and is effective October 1, 2015. If implementation of the 2015 CCRA occurs after October 1, 2015, the CCRA may need to be adjusted to recover the approved revenue requirements over the remaining months of the period, through September 2016. 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 2015 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 $0.00287 per-kWh method of recovery. Once the 2015/2016 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 **Exhibit 1**

CIP TRACKER AND CALCULATION OF PROPOSED CCRA **Page 1 of 1**

-based on projected 2015 sales and 2014 financial incentive

		January 2015	February* 2015	March 2015	April 2015	May 2015	June 2015	July 2015	August 2015	September 2015	Total
1	Beginning of Period Balance	$5,731,183	$4,993,222	$4,220,111	$3,658,759	$3,256,896	$2,722,738	$2,234,119	$1,677,972	$1,081,472	
2	Monthly Carrying Charge	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	
3	Monthly Carrying Charge	$3,773	$3,287	$2,778	$2,409	$2,144	$1,792	$1,471	$1,105	$712	$19,471
4	CIP Program Charges	$277,163	$237,949	$353,321	$478,817	$248,125	$295,103	$291,856	$267,372	$466,431	$2,916,136
5	CIP Incentive	$0	$0	$0	$0	$0	$0	$0	$0	$2,957,972	$2,957,972
6	Less: CIP Recovery thru Base Rates	($403,030)	($401,156)	($362,762)	($349,175)	($310,164)	($310,594)	($335,884)	($342,014)	($337,355)	($3,152,134)
7	Less: Conservation Adjustment (CIP Revenue)	($615,866)	($613,192)	($554,689)	($533,913)	($474,263)	($474,920)	($513,590)	($522,963)	($515,839)	($4,819,234)
8	End of Period Balance	$4,993,222	$4,220,111	$3,658,759	$3,256,896	$2,722,738	$2,234,119	$1,677,972	$1,081,472	$3,653,393	
9	**CCRA through September 2015**	**$0.00263**									
10	Projected sales (kWh)	233,464,082	234,085,864	210,908,188	203,008,763	180,328,139	180,578,019	195,281,350	198,845,160	196,136,454	
11	CCRC / kWh	$0.00172	$0.00172	$0.00172	$0.00172	$0.00172	$0.00172	$0.00172	$0.00172	$0.00172	

		October 2015	November 2015	December 2015	January 2016	February 2016	March 2016	April 2016	May 2016	June 2016	July 2016	August 2016	September 2016	Total
1	Beginning of Period Balance	$3,653,393	$3,232,995	$2,723,683	$3,653,590	$2,801,556	$1,913,258	$1,235,216	$741,431	$117,294	($460,474)	($1,088,582)	($1,758,199)	
2	Monthly Carrying Charge Rate	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	
3	Monthly Carrying Charge	$2,405	$2,128	$1,793	$2,405	$1,844	$1,260	$813	$488	$77	($303)	($717)	($1,157)	$11,037
4	CIP Program Charges	$449,049	$446,345	$1,966,880	$282,726	$242,726	$360,413	$488,429	$253,106	$301,027	$297,715	$272,740	$475,794	$5,836,950
5	CIP Incentive	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,213,641	$2,213,641
6	Less: CIP Recovery thru Base Rates	($326,687)	($358,887)	($389,231)	($426,101)	($424,491)	($389,586)	($368,345)	($328,890)	($329,318)	($346,797)	($352,837)	($348,505)	($4,389,673)
7	Less: Conservation Adjustment (CIP Revenue)	($545,165)	($598,899)	($649,536)	($711,064)	($708,377)	($650,129)	($614,682)	($548,841)	($549,555)	($578,724)	($588,803)	($581,574)	($7,325,348)
8	End of Period Balance	$3,232,995	$2,723,683	$3,653,590	$2,801,556	$1,913,258	$1,235,216	$741,431	$117,294	($460,474)	($1,088,582)	($1,758,199)	($0)	
9	**CCRA PROPOSED ($ / kWh)**	**$0.00287**												
10	Projected sales (kWh)	189,934,314	208,654,940	226,296,824	247,733,285	246,797,031	226,503,397	214,154,033	191,215,032	191,463,752	201,626,053	205,137,627	202,618,961	2,552,135,250
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 2015, forecast used thereafter

Otter Tail Power Company **Exhibit 2**
Comparison of Monthly Bill Impacts **Page 1 of 1**

CIP Surcharge (CCRA) is based on $0.00287 / kWh

Rate Class	*Average Data			Monthly Impacts		
Residential	825	avg. kWh/bills	**Current**	$2.17	$0.20	Monthly Bill $ Change
	$86.39	avg. $ / bill before CCRA	**Proposed**	$2.37	0.22%	Monthly Bill % Change
Farm	2,193	avg. kWh/bills	**Current**	$5.77	$0.53	Monthly Bill $ Change
	$202.86	avg. $ / bill before CCRA	**Proposed**	$6.30	0.25%	Monthly Bill % Change
General Service	2,644	avg. kWh/bills	**Current**	$6.95	$0.64	Monthly Bill $ Change
	$235.45	avg. $ / bill before CCRA	**Proposed**	$7.59	0.26%	Monthly Bill % Change
Large General Serv.	211,031	avg. kWh/bills	**Current**	$555.01	$50.71	Monthly Bill $ Change
	$12,588.16	avg. $ / bill before CCRA	**Proposed**	$605.72	0.39%	Monthly Bill % Change
Irrigation	1,858	avg. kWh/bills	**Current**	$4.89	$0.45	Monthly Bill $ Change
	$133.04	avg. $ / bill before CCRA	**Proposed**	$5.33	0.32%	Monthly Bill % Change
Outdoor Lighting	83	avg. kWh/bills	**Current**	$0.22	$0.02	Monthly Bill $ Change
	$11.89	avg. $ / bill before CCRA	**Proposed**	$0.24	0.16%	Monthly Bill % Change
Municipal Pumping	3,273	avg. kWh/bills	**Current**	$8.61	$0.79	Monthly Bill $ Change
	$228.97	avg. $ / bill before CCRA	**Proposed**	$9.39	0.33%	Monthly Bill % Change
Water Heating, Cntrl	216	avg. kWh/bills	**Current**	$0.57	$0.05	Monthly Bill $ Change
	$16.31	avg. $ / bill before CCRA	**Proposed**	$0.62	0.31%	Monthly Bill % Change
Interruptible Load	1,958	avg. kWh/bills	**Current**	$5.15	$0.47	Monthly Bill $ Change
	$99.06	avg. $ / bill before CCRA	**Proposed**	$5.62	0.45%	Monthly Bill % Change
Deferred Load	1,857	avg. kWh/bills	**Current**	$4.88	$0.45	Monthly Bill $ Change
	$98.31	avg. $ / bill before CCRA	**Proposed**	$5.33	0.43%	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.

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 $0.002~~63~~87 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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The Conservation Surcharge Factor is $0.00287 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;

Appendix A- Tables

Table 1

2014 CALCULATION OF CARRYING CHARGE ON CONSERVATION DOLLARS HELD IN CIP TRACKER ACCOUNT

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, 2013	0.00	66,518,900.48	(62,780,100.18)	681,850.54	4,835,557.78
January:					
Carrying Charge	--	--	--	34,695.13	34,695.13
Trf Carrying Charge Bal					0.00
Labor Accrual Adj					0.00
Activity	0.00	243,419.30	(830,758.55)	--	(587,339.25)
Deferred Taxes	--	--	--	--	--
Balance January 31, 2014	0.00	66,762,319.78	(63,610,858.73)	716,545.67	4,282,913.66
February:					
Carrying Charge	--	--	--	30,729.91	30,729.91
Labor Accrual Adj					0.00
Activity	0.00	338,618.13	(794,036.76)	--	(455,418.63)
Deferred Taxes	--	--	--	--	--
Balance February 28, 2014	0.00	67,100,937.91	(64,404,895.49)	747,275.58	3,858,224.94
March:					
Carrying Charge	--	--	--	27,708.41	27,708.41
Labor Accrual Adj					
Activity	0.00	317,276.88	(707,650.78)	--	(390,373.90)
Deferred Taxes	--	--	--	--	--
Balance March 31, 20114	0.00	67,418,214.79	(65,112,546.27)	774,983.99	3,495,559.45
April:					
Carrying Charge	--	--	--	25,080.64	25,080.64
Labor Accrual Adj					
Activity	0.00	429,970.57	(686,070.31)	--	(256,099.74)
Deferred Taxes	--			--	--
Balance April 30, 2014	0.00	67,848,185.36	(65,798,616.58)	800,064.63	3,264,540.35
May:					
Carrying Charge	--	--	--	23,423.08	23,423.08
Lost Margin & Bonus/Incentiv					0.00
Labor Accrual Adj					
Activity	0.00	222,812.66	(599,419.89)	--	(376,607.23)
Deferred Taxes	--	--	--	--	--
Balance May 31, 2014	0.00	68,070,998.02	(66,398,036.47)	823,487.71	2,911,356.20
June:					
Carrying Charge	--	--	--	20,888.98	20,888.98
Bonus/Incentive					0.00
Labor Accrual Adj					
Activity	0.00	264,998.60	(587,918.29)	--	(322,919.69)
Deferred Taxes	--	--	--	--	--
Balance June 30, 2014	0.00	68,335,996.62	(66,985,954.76)	844,376.69	2,609,325.49
July:					
Carrying Charge	--	--	--	18,721.91	18,721.91
Bonus/Incentive					0.00
Labor Accrual Adj					
Activity	0.00	262,082.84	(617,288.47)	--	(355,205.63)
Deferred Taxes	--	--	--	--	--
Balance July 31, 2014	0.00	68,598,079.46	(67,603,243.23)	863,098.60	2,272,841.77

Table 1

2014 CALCULATION OF CARRYING CHARGE ON CONSERVATION DOLLARS HELD IN CIP TRACKER ACCOUNT

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)
August:					
Carrying Charge	--	--		16,307.64	16,307.64
Bonus/Incentive					0.00
Labor Accrual Adj					
Activity	0.00	240,096.46	(624,363.86)	--	(384,267.40)
Deferred Taxes	--	--	--	--	--
Balance August 31, 2014	0.00	68,838,175.92	(68,227,607.09)	879,406.24	1,904,882.01
September:					
Carrying Charge	--	--	--	11,598.61	11,598.61
Lost Margin & Bonus/Incentive		4,026,600.00			4,026,600.00
Labor Accrual Adj					0.00
Activity	0.00	418,848.22	(606,082.91)	--	(187,234.69)
Deferred Taxes	--	--	--	--	--
Balance Sept. 30, 2014	0.00	73,283,624.14	(68,833,690.00)	891,004.85	5,755,845.93
October:					
Carrying Charge	--	--	--	3,789.27	3,789.27
Lost Margin & Bonus/Incentive					0.00
Labor Accrual Adj					
Activity	0.00	403,239.58	(758,504.58)	--	(355,265.00)
Deferred Taxes	--	--	--	--	--
Balance Oct. 31, 2014	0.00	73,686,863.72	(69,592,194.58)	894,794.12	5,404,370.20
November:					
Carrying Charge	--		--	3,557.88	3,557.88
Labor Accrual Adj					
Activity	0.00	400,811.27	(816,395.20)	--	(415,583.93)
Deferred Taxes	--	--	--	--	--
Balance Nov. 30, 2014	0.00	74,087,674.99	(70,408,589.78)	898,352.00	4,992,344.15
December:					
Carrying Charge	--	--	--	3,286.63	3,286.63
Lost Margin & Bonus/Incentive		0.00			0.00
Labor Accrual Adj					
Activity	0.00	1,646,756.05	(911,204.09)	--	735,551.96
Deferred Taxes	--	--	--	--	--
Balance Dec. 31, 2014	0.00	75,734,431.04	(71,319,793.87)	901,638.63	5,731,182.74

* Carrying charge rate changed to 0.79% (short-term debt) as of September 26, 2014.

Table 2 - A
2014 INCENTIVE MECHANISM - PRE-YEAR INCENTIVE CALCULATION FIGURES
Financial Incentive Project
Otter Tail Power Company

3-year Weather-Normalized Sales Average:	2,091,441,263	
1.0% of Sales:	20,914,413	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:	$5,487,500	From 2014 - 2016 Amended Compliance Filing from March 14, 2014, assessments removed
Approved CIP Energy Goal:	31,485,424	From 2014 - 2016 Amended Compliance Filing from March 14, 2014
Estimated Net Benefits at Approved Goal:	$20,748,621	From 2014 - 2016 Amended Compliance Filing from March 14, 2014, assessments removed

Modifications:

Budget	None
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 2014

Inputs:

Average Sales:	2,091,441,263	
1.0% Energy Savings:	20,914,413	
Historic Average Savings:	1.44%	2008-2012, high and low removed
Earning Threshold:	**0.40%**	plus one unit of energy
Earning Threshold in Energy Savings:	8,365,766	
Award zero point:	0.30%	
Award zero point in Energy Savings:	6,274,324	
Steps from zero point to 1.5%	12	
Size of steps in Energy Savings:	2,091,441	

Incentive Calibration:

Average Incentive per unit at 1.5%:	$0.0700	Set by Commission in approval of incentive mechanism & calibration
Incentive Cap:	**$0.0875**	125% of incentive per kwh
Energy savings at 1.5%:	31,371,619	
Targeted incentive at 1.5%:	$2,196,013	
Multiplier:	**0.00885**	**Percent of Net Benefits received for every 0.1% of sales saved**

Table 2 - A
2014 INCENTIVE MECHANISM - PRE-YEAR INCENTIVE CALCULATION FIGURES
Financial Incentive Project
Otter Tail Power Company

Estimated Incentive Levels:

Estimated Incentive Levels:

			NET BENEFITS	INCENTIVE WITH CAP	
Achievement Level (% of sales)	Energy Saved	Benefits Awarded - Linear	Net Benefits - Linear	Incentive Award-Linear Proposal, $0.0875/kWh Cap	Average Incentive per unit Saved
0.00%	**0**	0.000%	$0	**$0**	$0.0000
0.10%	**2,091,441**	0.000%	$1,378,242	**$0**	$0.0000
0.20%	**4,182,883**	0.000%	$2,756,483	**$0**	$0.0000
0.30%	**6,274,324**	0.000%	$4,134,725	**$0**	$0.0000
0.40%	**8,365,765**	0.000%	$5,512,967	**$0**	$0.0000
0.50%	**10,457,206**	1.770%	$6,891,208	**$122,001**	$0.0117
0.60%	**12,548,648**	2.656%	$8,269,450	**$219,601**	$0.0175
0.70%	**14,640,089**	3.541%	$9,647,691	**$341,602**	$0.0233
0.80%	**16,731,530**	4.426%	$11,025,933	**$488,003**	$0.0292
0.90%	**18,822,971**	5.311%	$12,404,175	**$658,804**	$0.0350
1.00%	**20,914,413**	6.196%	$13,782,416	**$854,005**	$0.0408
1.10%	**23,005,854**	7.082%	$15,160,658	**$1,073,607**	$0.0467
1.20%	**25,097,295**	7.967%	$16,538,900	**$1,317,608**	$0.0525
1.30%	**27,188,736**	8.852%	$17,917,141	**$1,586,010**	$0.0583
1.40%	**29,280,178**	9.737%	$19,295,383	**$1,878,811**	$0.0642
1.50%	**31,371,619**	10.622%	$20,673,624	**$2,196,013**	$0.0700
1.60%	**33,463,060**	11.507%	$22,051,866	**$2,537,615**	$0.0758
1.62%	**33,805,392**	11.652%	$26,035,459	**$2,957,972**	$0.0875
1.70%	**35,554,501**	12.393%	$23,430,108	**$2,903,618**	$0.0817
1.80%	**37,645,943**	13.278%	$24,808,349	**$3,294,020**	$0.0875
1.90%	**39,737,384**	14.163%	$26,186,591	**$3,477,021**	$0.0875
2.00%	**41,828,825**	15.048%	$27,564,833	**$3,660,022**	$0.0875
2.10%	**43,920,267**	15.933%	$28,943,074	**$3,843,023**	$0.0875
2.20%	**46,011,708**	16.819%	$30,321,316	**$4,026,024**	$0.0875
2.30%	**48,103,149**	17.704%	$31,699,557	**$4,209,026**	$0.0875
2.40%	**50,194,590**	18.589%	$33,077,799	**$4,392,027**	$0.0875
2.50%	**52,286,032**	19.474%	$34,456,041	**$4,575,028**	$0.0875
2.60%	**54,377,473**	20.359%	$35,834,282	**$4,758,029**	$0.0875
2.70%	**56,468,914**	21.245%	$37,212,524	**$4,941,030**	$0.0875
2.80%	**58,560,355**	22.130%	$38,590,766	**$5,124,031**	$0.0875
2.90%	**60,651,797**	23.015%	$39,969,007	**$5,307,032**	$0.0875
3.00%	**62,743,238**	23.900%	$41,347,249	**$5,490,033**	$0.0875

Table 2 - B
2014 INCENTIVE MECHANISM - POST-YEAR INCENTIVE CALCULATION FIGURES
Financial Incentive Project
Otter Tail Power Company

Actual CIP Results for 2014		
Spending:	$5,188,931	From Utility Status Report
Energy Saved:	33,805,392	From Utility Status Report
Total Net Benefits Achieved:	$26,035,459	From Utility Status Report
	$19,557	Exclude negative net benefits in low-income program
	$220,786	Exclude assessments from net benefits
Net Benefits Achieved for Incentive Calculation:	$26,275,803	
	162%	percent of the 1% goal achieved
Resulting Incentive:		
Steps above Zero Point:	13.16368	
Percent of Net Benefits Awarded:	11.652%	Linear
Financial Incentive Award:	$2,957,972	Capped Incentive @ 8.75 cents/kWh
OTP INPUTS INDICATED IN YELLOW		
CALCULATED FINANCIAL INCENTIVE AWARD IN GREEN		

Table 3
2014 PROJECT COSTS, SAVINGS, AND BENEFITS
Financial Incentive Project
Otter Tail Power Company

	2014 PROPOSED SAVINGS, COSTS AND BENEFITS				2014 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	7,233	$80,000	$280,002	$200,002	3,474	$49,219	$134,402	$85,183
Air Source Heat Pumps	1,301,886	$121,000	$1,074,563	$953,563	849,067	$67,881	$732,334	$664,453
Appliance Recycling	574,491	$115,000	$295,221	$180,221	475,932	$91,078	$244,002	$152,924
Change A Light - Be Bright	4,377,992	$346,000	$2,363,543	$2,017,543	4,389,009	$244,783	$2,360,223	$2,115,440
ECM Motors (New)	93,001	$35,000	$87,626	$52,626	31,328	$9,091	$29,425	$20,334
Energy Feedback Program	2,085,661	$370,600	$406,274	$35,674	2,532,552	$323,243	$493,326	$170,083
Geothermal Heat Pumps	921,413	$143,000	$1,083,944	$940,944	883,557	$153,490	$1,036,285	$882,794
Home Insulation	184,998	$56,000	$99,262	$43,262	181,640	$30,476	$97,460	$66,984
Home Transformer (New)	207,727	$60,000	$110,312	$50,312	88,634	$52,218	$48,748	($3,470)
School Kits (New)	126,900	$24,000	$56,224	$32,224	337,657	$25,460	$145,323	$119,862
Water Heating Store & Save (New)	214,036	$40,000	$354,712	$314,712	348,187	$9,264	$576,062	$566,798
Advertising & Education	N/A	$150,000	$0	($150,000)	N/A	$116,647	$0	($116,647)
Financing	N/A	$13,000	$0	($13,000)	N/A	$5,408	$0	($5,408)
Implementation & Training	N/A	$40,000	$0	($40,000)	N/A	$48,166	$0	($48,166)
Total - Residential	10,095,339	$1,593,600	$6,211,683	$4,618,083	10,121,037	$1,226,425	$5,897,589	$4,671,165
Commercial								
Adjustable Speed Drives	3,810,456	$340,400	$3,337,910	$2,997,510	5,647,505	$435,839	$5,341,250	$4,905,411
Air Conditioning Control - Commercial	1,222	$34,000	$142,524	$108,524	2,110	$10,068	$246,180	$236,111
Air Source Heat Pumps	696,459	$68,000	$718,914	$650,914	409,884	$38,739	$356,177	$317,438
Commercial Design Assistance	2,419,175	$490,500	$3,155,660	$2,665,160	361,875	$214,451	$552,307	$337,856
Geothermal Heat Pumps	704,911	$122,000	$875,768	$753,768	125,318	$62,871	$125,123	$62,252
Grant	3,476,772	$721,000	$4,502,500	$3,781,500	2,037,200	$340,395	$2,692,791	$2,352,396
Industrial Process Efficiency (New)	357,043	$85,000	$330,994	$245,994	2,516,836	$248,292	$3,314,375	$3,066,083
Lighting	3,400,273	$563,000	$3,575,478	$3,012,478	8,090,987	$1,252,180	$8,917,114	$7,664,934
Lighting - New Construction	2,164,338	$143,000	$1,727,274	$1,584,274	2,170,324	$125,698	$2,200,616	$2,074,918
Motors	140,895	$81,000	$133,790	$52,790	607,146	$165,384	$725,450	$560,067
PC Power Supply (New)	793,399	$67,000	$232,614	$165,614	184,989	$16,268	$54,240	$37,971
Recommissioning	1,937,520	$272,000	$468,824	$196,824	0	$26,210	$0	($26,210)
Refrigeration	1,238,014	$170,000	$669,327	$499,327	1,240,938	$189,112	$649,061	$459,949
Advertising & Education	N/A	$25,000	$0	($25,000)	N/A	$30,683	$0	($30,683)
Compressed Air Audits	N/A	$20,000	$0	($20,000)	N/A	$22,503	$0	($22,503)
Financing	N/A	$32,000	$0	($32,000)	N/A	$5,408	$0	($5,408)
Implementation & Training	N/A	$60,000	$0	($60,000)	N/A	$55,352	$0	($55,352)
Total - Commercial	21,140,476	$3,293,900	$19,871,576	$16,577,676	23,395,112	$3,239,456	$25,174,685	$21,935,228

Table 3
2014 PROJECT COSTS, SAVINGS, AND BENEFITS
Financial Incentive Project
Otter Tail Power Company

	2014 PROPOSED SAVINGS, COSTS AND BENEFITS				2014 ACTUAL SAVINGS, COSTS AND BENEFITS			
	ENERGY SAVINGS	TOTAL COSTS	TOTAL BENEFITS	NET BENEFITS	ENERGY SAVINGS	TOTAL COSTS	TOTAL BENEFITS	NET BENEFITS
On For Conservation								
Town Energy Challenge - Inactive	0	$0	$0	$0	83,714	$10,850	$18,663	$7,813
Total - On For Conservation	0	$0	$0	$0	83,714	$10,850	$18,663	$7,813
Low-Income								
House Therapy	249,609	$150,000	$152,862	$2,862	204,930	$142,588	$123,031	($19,557)
Total - Low Income	249,609	$150,000	$152,862	$2,862	204,930	$142,588	$123,031	($19,557)
Program Development & Regulatory Requirements								
Planning - Regulatory Affairs	N/A	$300,000	$0	($300,000)	N/A	$283,664	$0	($283,664)
Research & Development	N/A	$150,000	$0	($150,000)	N/A	$8,962	$0	($8,962)
NGEA - Regulatory Assessments	N/A	$95,000	$0	($95,000)	N/A	$99,858	$0	($99,858)
PUC Assessments	N/A	$20,000	$0	($20,000)	N/A	$17,020	$0	($17,020)
Made in Minnesota Solar Energy Assesment	N/A	$103,909	$0	($103,909)	N/A	$103,909	$0	($103,909)
Total - Development & Regulatory Requirements	0	$668,909	$0	($668,909)	0	$513,413	$0	($513,413)
Miscellaneous Projects								
Company CIP Projects	0	$0	$0	$0	0	$40,274	$0	($40,274)
Business Education - Inactive	0	$0	$0	$0	0	$996	$0	($996)
Residential Demand Control - Inactive	0	$0	$0	$0	599	$1,877	$10,421	$8,545
Accounting Adjustments	0	$0	$0	$0	0	$13,052	$0	($13,052)
Total - Miscellaneous	0	$0	$0	$0	599	$56,198	$10,421	($45,777)
Total - All CIP	31,485,425	$5,706,409	$26,236,121	$20,529,713	33,805,392	$5,188,931	$31,224,390	$26,035,459

All numbers are for a single year - 2014. DSMORE software was used for the analysis, with figures discounted to 2014.

TABLE 4
2014 BENEFIT COST RATIOS - DIRECT IMPACT & TOTAL CIP
Financial Incentive Project
Otter Tail Power Company

	As Filed - 2014 Proposed Benefit/Cost Ratios					Actual - 2014 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	3.50	5.19	3.25	5.19	inf.	2.73	4.05	2.58	4.05	inf.
Air Source Heat Pumps	8.88	6.02	0.99	6.02	6.98	10.79	6.27	1.05	6.27	6.37
Appliance Recycling	2.57	4.17	0.69	4.17	inf.	2.68	4.41	0.70	4.41	inf.
Change A Light - Be Bright	6.83	9.64	0.80	9.64	25.16	9.64	9.49	0.82	9.49	15.59
ECM Motors (New)	2.50	2.80	0.69	2.80	5.57	3.24	3.31	0.73	3.31	5.62
Energy Feedback Program	1.10	1.10	0.48	1.10	inf.	1.53	1.53	0.54	1.53	inf.
Geothermal Heat Pumps	7.58	1.78	1.17	1.78	1.49	6.75	1.78	1.14	1.78	1.51
Home Insulation	1.77	1.16	0.46	1.16	2.64	3.20	1.80	0.33	1.80	6.82
Home Transformer (New)	1.84	3.82	0.55	3.82	18.34	0.93	1.41	0.42	1.41	28.87
School Kits (New)	2.34	4.70	0.61	4.70	inf.	5.71	28.21	0.70	28.21	inf.
Water Heating Store & Save (New)	8.87	8.87	6.29	8.87	inf.	62.19	62.19	16.02	62.19	inf.
Advertising & Education	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Financing	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Implementation & Training	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total - Residential	3.90	3.30	0.86	3.30	5.90	4.81	3.58	0.89	3.58	5.93
Commercial										
Adjustable Speed Drives	9.81	6.03	1.30	6.03	3.44	12.26	8.76	1.43	8.76	4.42
Air Conditioning Control - Commercial	4.19	6.74	4.08	6.74	inf.	24.45	43.21	21.16	43.21	inf.
Air Source Heat Pumps	10.57	3.32	1.21	3.32	2.18	9.19	3.86	1.07	3.86	2.90
Commercial Design Assistance	6.43	4.64	1.44	4.64	2.16	2.58	1.82	1.14	1.82	0.97
Geothermal Heat Pumps	7.18	1.76	1.18	1.76	1.05	1.99	1.46	0.75	1.46	1.55
Grant	6.24	2.85	1.87	2.85	1.06	7.91	3.57	1.73	3.57	1.34
Industrial Process Efficiency (New)	3.89	2.98	1.15	2.98	2.18	13.35	7.82	2.06	7.82	2.56
Lighting	6.35	3.48	1.51	3.48	1.78	7.12	3.13	1.48	3.13	1.53
Lighting - New Construction	12.08	3.50	1.42	3.50	1.93	17.51	2.21	1.62	2.21	0.99
Motors	1.65	1.72	0.83	1.72	1.74	4.39	6.20	1.33	6.20	3.74
PC Power Supply (New)	3.47	3.51	0.99	3.51	5.35	3.33	2.89	0.98	2.89	4.17
Recommissioning	1.72	1.17	0.62	1.17	1.86	inf.	inf.	inf.	inf.	inf.
Refrigeration	3.94	3.95	1.14	3.95	3.93	3.43	3.33	1.06	3.33	3.48
Advertising & Education	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressed Air Audits	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Financing	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Implementation & Training	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total - Commercial	6.03	3.37	1.39	3.37	1.82	7.77	3.88	1.51	3.88	1.85
On For Conservation - INACTIVE										
Town Energy Challenge - Inactive	N/A	N/A	N/A	N/A	N/A	1.72	1.72	0.63	1.72	inf.
Total - On For Conservation	N/A	N/A	N/A	N/A	N/A	1.72	1.72	0.63	1.72	inf.
Low Income										
House Therapy	1.02	9.01	0.50	9.01	inf.	0.86	6.11	0.44	6.11	inf.
Total - Low Income	1.02	9.01	0.50	9.01	inf.	0.86	6.11	0.44	6.11	inf.

TABLE 4
2014 BENEFIT COST RATIOS - DIRECT IMPACT & TOTAL CIP
Financial Incentive Project
Otter Tail Power Company

	As Filed - 2014 Proposed Benefit/Cost Ratios					Actual - 2014 Benefit/Cost Ratios				
	Utility Test	**TRC Test**	**RIM Test**	**Societal Test**	**Participant Test**	**Utility Test**	**TRC Test**	**RIM Test**	**Societal Test**	**Participant Test**
Miscellaneous Projects										
Company CIP Projects	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Business Education - Inactive	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential Demand Control - Inactive	N/A	N/A	N/A	N/A	N/A	5.55	9.62	4.41	9.62	inf.
Accounting Adjustments	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total - Miscellaneous	N/A	N/A	N/A	N/A	N/A	5.55	9.62	4.41	9.62	inf.
Program Development And Regulatory Requirements										
Planning - Regulatory Affairs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Research & Development	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NGEA - Regulatory Assessments	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PUC Assessments	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Made in Minnesota Solar Energy Assesment	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total - Development & Regulatory Requirements	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total - All CIP	4.78	3.23	1.18	3.23	2.49	6.02	3.66	1.29	3.66	2.40

All numbers are for a single year - 2014. DSMORE software was used for the analysis, with figures discounted to 2014.

Table 5
2014 CIP PROGRAM STATUS REPORT / CIP TRACKER RECAP
Financial Incentive Project -- 2014 Conservation Improvement Programs
Otter Tail Power Company

	2014 Expenditures			2014 Participation			2014 Energy Savings - kWh			2014 Coincident Demand Savings - kW		
	Actual	Budget	% Goal	Actual	Budget	% Goal	Actual	Budget	% Goal	Actual	Budget	% Goal
Residential Programs												
Air Conditioning Control	$49,219	$80,000	62%	72	150	48%	3,474	7,233	48%	51.151	106.560	48%
Air Source Heat Pumps	$67,881	$121,000	56%	98	137	72%	849,067	1,301,886	65%	13.041	18.230	72%
Appliance Recycling	$91,078	$115,000	79%	449	545	82%	475,932	574,491	83%	66.696	80.960	82%
Change A Light - Be Bright	$244,783	$346,000	71%	111,329	96,000	116%	4,389,009	4,377,992	100%	514.969	519.050	99%
ECM Motors (New)	$9,091	$35,000	26%	40	120	33%	31,328	93,001	34%	2.829	8.490	33%
Energy Feedback Program	$323,243	$370,600	87%	34,254	32,810	104%	2,532,552	2,085,661	121%	1,419.996	1,169.430	121%
Geothermal Heat Pumps	$153,490	$143,000	107%	41	43	95%	883,557	921,413	96%	21.257	22.220	96%
Home Insulation	$30,476	$56,000	54%	31	55	56%	181,640	184,998	98%	0.000	0.000	0%
Home Transformer (New)	$52,218	$60,000	87%	240	1,575	15%	88,634	207,727	43%	4.895	14.810	33%
School Kits (New)	$25,460	$24,000	106%	1,252	1,275	98%	337,657	126,900	266%	24.579	10.220	241%
Water Heating Store & Save (New)	$9,264	$40,000	23%	14,026	8,622	163%	348,187	214,036	163%	3,215.786	1,980.200	162%
Advertising & Education	$116,647	$150,000	78%	49,807	10,000	498%	N/A	N/A	N/A	N/A	N/A	N/A
Financing	$5,408	$13,000	42%	0	7	0%	N/A	N/A	N/A	N/A	N/A	N/A
Implementation & Training	$48,166	$40,000	120%	74	175	42%	N/A	N/A	N/A	N/A	N/A	N/A
Total - Residential	$1,226,425	$1,593,600	77%	211,713	151,514	140%	10,121,037	10,095,339	100%	5,335.199	3,930.170	136%
Commercial Programs												
Adjustable Speed Drives	$435,839	$340,400	128%	150	135	111%	5,647,505	3,810,456	148%	899.453	504.200	178%
Air Conditioning Control - Commercial	$10,068	$34,000	30%	39	40	98%	2,110	1,222	173%	94.589	54.760	173%
Air Source Heat Pumps	$38,739	$68,000	57%	55	131	42%	409,884	696,459	59%	4.393	10.460	42%
Commercial Design Assistance	$214,451	$490,500	44%	2	6	33%	361,875	2,419,175	15%	102.302	509.210	20%
Geothermal Heat Pumps	$62,871	$122,000	52%	4	35	11%	125,318	704,911	18%	2.067	18.080	11%
Grant	$340,395	$721,000	47%	37	38	97%	2,037,200	3,476,772	59%	466.409	1,022.580	46%
Industrial Process Efficiency (New)	$248,292	$85,000	292%	1	1	100%	2,516,836	357,043	705%	660.668	54.280	1217%
Lighting	$1,252,180	$563,000	222%	582	346	168%	8,090,987	3,400,273	238%	2,009.035	1,091.240	184%
Lighting - New Construction	$125,698	$143,000	88%	128	202	63%	2,170,324	2,164,338	100%	495.137	369.520	134%
Motors	$165,384	$81,000	204%	161	71	227%	607,146	140,895	431%	155.090	22.650	685%
PC Power Supply (New)	$16,268	$67,000	24%	1,148	3,562	32%	184,989	793,399	23%	43.131	184.960	23%
Recommissioning	$26,210	$272,000	10%	0	10	0%	0	1,937,520	0%	0.000	36.540	0%
Refrigeration	$189,112	$170,000	111%	89	119	75%	1,240,938	1,238,014	100%	215.433	241.850	89%
Advertising & Education	$30,683	$25,000	123%	39	10	390%	N/A	N/A	N/A	N/A	N/A	N/A
Compressed Air Audits	$22,503	$20,000	113%	3	4	75%	N/A	N/A	N/A	N/A	N/A	N/A
Financing	$5,408	$32,000	17%	0	5	0%	N/A	N/A	N/A	N/A	N/A	N/A
Implementation & Training	$55,352	$60,000	92%	408	250	163%	N/A	N/A	N/A	N/A	N/A	N/A
Total - Commercial	$3,239,456	$3,293,900	98%	2,846	4,965	57%	23,395,112	21,140,476	111%	5,147.706	4,120.330	125%
On for Conservation - Inactive												
Town Energy Challenge - Inactive	$10,850	$0	N/A	273	0	N/A	83,714	0	N/A	59.219	0.000	N/A
Total - On for Conservation	$10,850	$0	N/A	273	0	N/A	83,714	0	N/A	59.219	0.000	N/A
Low Income												
House Therapy	$142,588	$150,000	95%	100	160	63%	204,930	249,609	82%	21.406	31.110	69%
Total - Low Income	$142,588	$150,000	95%	100	160	63%	204,930	249,609	82%	21.406	31.110	69%
Program Development & Regulatory												
Planning - Regulatory Affairs	$283,664	$300,000	95%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Research & Development	$8,962	$150,000	6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NGEA - Regulatory Assessments	$99,858	$95,000	105%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PUC Assessments	$17,020	$20,000	85%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Made in Minnesota Solar Energy Assesment	$103,909	$103,909	100%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total - Development & Regulatory	$513,413	$668,909	77%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 5
2014 CIP PROGRAM STATUS REPORT / CIP TRACKER RECAP
Financial Incentive Project -- 2014 Conservation Improvement Programs
Otter Tail Power Company

	2014 Expenditures			2014 Participation			2014 Energy Savings - kWh			2014 Coincident Demand Savings - kW		
	Actual	Budget	% Goal	Actual	Budget	% Goal	Actual	Budget	% Goal	Actual	Budget	% Goal
Miscellaneous Projects												
Company CIP Projects	$40,274	$0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Business Education - Inactive	$996	$0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential Demand Control - Inactive	$1,877	$0	N/A	1	0	N/A	599	0	N/A	0.782	0.000	N/A
Accounting Adjustments	$13,052	$0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total - Miscellaneous	$56,198	$0	N/A	1	N/A	N/A	599	0	N/A	0.782	0.000	N/A
Total - 2014 CIP Project Costs	$5,188,931	$5,706,409	91%	214,933	156,639	137%	33,805,392	31,485,425	107%	10,564.312	8,081.610	131%
CIP Tracker Carrying Costs	$219,788											
Total - 2014 CIP with Carrying Costs & Reg. NGEA	$5,408,719	$5,706,409	95%	214,933	156,639	137%	33,805,392	31,485,425	107%	10,564.312	8,081.610	131%
Incentives - 2013 [Bonus]	$4,026,600											
CIP Recovery Mechanism	($4,555,135)											
Recovered Through Rates (inc cc recovery)	($3,984,559)											
Prior Year Carry Forward Balance	$4,835,558											
Tracker Balance - Year End 2014	$5,731,183											

Table 6
2014 CIP PROGRAM STATUS REPORT / CIP TRACKER RECAP - COST PER KW / KWH
Financial Incentive Project -- 2014 Conservation Improvement Programs
Otter Tail Power Company

	2014 Expenditures		2014 Energy Savings - kWh		Cost per kWh		2014 Coincident Demand Savings - kW		Cost per kW	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
Residential Programs - Direct Impact										
Air Conditioning Control	$49,219	$80,000	3,474	7,233	$14.17	$11.06	51.151	106.560	$962	$751
Air Source Heat Pumps	$67,881	$121,000	849,067	1,301,886	$0.08	$0.09	13.041	18.230	$5,205	$6,637
Appliance Recycling	$91,078	$115,000	475,932	574,491	$0.19	$0.20	66.696	80.960	$1,366	$1,420
Change A Light - Be Bright	$244,783	$346,000	4,389,009	4,377,992	$0.06	$0.08	514.969	519.050	$475	$667
ECM Motors (New)	$9,091	$35,000	31,328	93,001	$0.29	$0.38	2.829	8.490	$3,214	$4,122
Energy Feedback Program	$323,243	$370,600	2,532,552	2,085,661	$0.13	$0.18	1,419.996	1,169.430	$228	$317
Geothermal Heat Pumps	$153,490	$143,000	883,557	921,413	$0.17	$0.16	21.257	22.220	$7,221	$6,436
Home Insulation	$30,476	$56,000	181,640	184,998	$0.17	$0.30	0.000	0.000	$0	$0
Home Transformer (New)	$52,218	$60,000	88,634	207,727	$0.59	$0.29	4.895	14.810	$10,668	$4,051
School Kits (New)	$25,460	$24,000	337,657	126,900	$0.08	$0.19	24.579	10.220	$1,036	$2,348
Water Heating Store & Save (New)	$9,264	$40,000	348,187	214,036	$0.03	$0.19	3,215.786	1,980.200	$3	$20
Total - Residential	$1,056,204	$1,390,600	10,121,037	10,095,339	$0.10	$0.14	5,335.199	3,930.170	$198	$354
Commercial Programs - Direct Impact										
Adjustable Speed Drives	$435,839	$340,400	5,647,505	3,810,456	$0.08	$0.09	899.453	504.200	$485	$675
Air Conditioning Control - Commercial	$10,068	$34,000	2,110	1,222	$4.77	$27.83	94.589	54.760	$106	$621
Air Source Heat Pumps	$38,739	$68,000	409,884	696,459	$0.09	$0.10	4.393	10.460	$8,818	$6,501
Commercial Design Assistance	$214,451	$490,500	361,875	2,419,175	$0.59	$0.20	102.302	509.210	$2,096	$963
Geothermal Heat Pumps	$62,871	$122,000	125,318	704,911	$0.50	$0.17	2.067	18.080	$30,416	$6,748
Grant	$340,395	$721,000	2,037,200	3,476,772	$0.17	$0.21	466.409	1,022.580	$730	$705
Industrial Process Efficiency (New)	$248,292	$85,000	2,516,836	357,043	$0.10	$0.24	660.668	54.280	$376	$1,566
Lighting	$1,252,180	$563,000	8,090,987	3,400,273	$0.15	$0.17	2,009.035	1,091.240	$623	$516
Lighting - New Construction	$125,698	$143,000	2,170,324	2,164,338	$0.06	$0.07	495.137	369.520	$254	$387
Motors	$165,384	$81,000	607,146	140,895	$0.27	$0.57	155.090	22.650	$1,066	$3,576
PC Power Supply (New)	$16,268	$67,000	184,989	793,399	$0.09	$0.08	43.131	184.960	$377	$362
Recommissioning	$26,210	$272,000	0	1,937,520	$0.00	$0.14	0.000	36.540	$0	$7,444
Refrigeration	$189,112	$170,000	1,240,938	1,238,014	$0.15	$0.14	215.433	241.850	$878	$703
Total - Commercial	$3,125,509	$3,156,900	23,395,112	21,140,476	$0.13	$0.15	5,147.706	4,120.330	$607	$766
Low Income										
House Therapy	$142,588	$150,000	204,930	249,609	$0.70	$0.60	21.406	31.110	$6,661	$4,822
Total - Low Income	$142,588	$150,000	204,930	249,609	$0.70	$0.60	21.406	31.110	$6,661	$4,822
On for Conservation - Inactive										
Town Energy Challenge - Inactive	$10,850	$0	83,714	0	$0.13	$0.00	59.219	0.000	$183	$0
Total - On for Conservation	$10,850	$0	83,714	0	$0.13	$0.00	59.219	0.000	$183	$0
Total - Direct Impact	$4,335,151	$4,697,500	33,804,793	31,485,425	$0.13	$0.15	10,563.530	8,081.610	$410	$581
Miscellaneous										
Company CIP Projects	$40,274	$0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Business Education - Inactive	$996	$0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Residential Demand Control - Inactive	$1,877	$0	599	0	$3.14	$0.00	0.782	0.000	$2,400	$0
Accounting Adjustments	$13,052	$0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total - Miscellaneous	$56,198	$0	599	0	$93.89	$0.00	0.782	0.000	$71,884	$0
Total - Indirect Impact	$797,581	$1,008,909								
Total - 2014 CIP Project Costs	$5,188,931	$5,706,409	33,805,392	31,485,425	$0.15	$0.18	10,564.312	8,081.610	$491	$706

Appendix B- Other Evaluations

- **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 23rd, 2015**

RE: **Impact Evaluation Results for the Bill Analyzer Program (Program Year 2014)**

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	692
Used Home Energy Center	449
Used the Bill History or Bill Analysis	474
Used CSR	1,218
Level 1	583
Level 2	1,033
Level 3	432[1]

[1] The saving impact of 432 kWh / year achieved via using level 3 is not statistically significant at a confidence level of 95%, i.e. there is 95% chance that the impact could be anywhere from as low as not saving at all to as high as 1,000+ kWh / year, with 432 kWh/year being in the middle of this range.

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) including a binary variable which tracks months of participation. This binary variable is defined as being 1 for all months

since inception of program participation. It is defined as being 0 for all the control group members and for treatment group participants in any month before 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.[2] 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. 2014 from participants in Minnesota, a control group of non-participating OTPC residential customers also in Minnesota, weather data (average monthly temperate) 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.

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

Table 2: Sample used for estimation.

	Participants	Non-participants
Original Sample size	3,040	4,121
Eliminated due to excessive missing or zero reads or extremely small reads in all months	92	267
Eliminated Dashboard (IBP) only customers[3]	119	0
Estimation Sample	2,829	3,854
Total Sample Size	6,683 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 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	871	118	1467	1490	463	75
% of total	31%	4%	52%	53%	16%	3%

Finally, table 4 presents that average annual kWh usage for both the participants and non-participants for 2008, 2009, 2010, 2011, 2012, 2013 and 2014.

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

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
2014	18,398	14,309

Estimation

The estimated models are presented in Table 5-7.[4]

Table 5: Estimated Overall Savings – dependent variable is daily kWh usage, using usage from Jan. 2008 through Dec. 2014 (savings are negative).

Independent Variable	Coefficient (kWh/d)	t-value
Logged into the Bill Analyzer website	-1.89	-7.52
Sample Size	176,204 obs (5,990 homes of which 2,829 homes are BA participants, with 3,854 are control group members)	
R-Squared	64%	

[4] 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 6: Estimated Savings by Tool Used – dependent variable is daily kWh usage, using usage from Jan. 2008 through Dec. 2014 (savings are negative)

Independent Variable	Coefficient (kWh/d)	t-value
Used Home Energy Center	-1.23	-3.43
Used the Bill History or Bill Analysis	-1.30	-4.42
Used CSR	-3.34	-4.33
Sample Size	176,204 obs (5,990 homes of which 2,829 homes are BA participants, with 3,854 are control group members)	
R-Squared	64%	

Table 7: Estimated Savings by Achieved Level – dependent variable is daily kWh usage, using usage from Jan. 2008 through Dec. 2014 (savings are negative) of those who actively participated in 2014. (savings are negative).

Independent Variable	Coefficient (kWh/d)	t-value
Reached Level 1	-1.60	-4.56
Reached Level 2	-2.83	-6.44
Reached Level 3[5]	-1.18	-1.33[6]
Sample Size	176,204 obs (5,990 homes of which 2,829 homes are BA participants, with 3,854 are control group members)	
R-Squared	64%	

[5] The coefficient estimates are total saving of each level. Therefore the total saving of level 1 customers are 584 kWh per year (1.60*365). The total saving of level 2 customers are 1,033 kWh per year (2.83*365). Level 3 customers achieved 449 kWh/year (1.18*365) with t-value = 1.33 which means the saving estimate of 1.18 is not significantly different from 0).

[6] Not significant at 95% confidence level

These estimated models show that the Bill Analyzer program does induce energy conservation by participants, with a statistically significant average annual savings of 692 kWh (1.89*365) / year. Customers who used CSR achieved the highest savings level of 1,219 kWh / year. Customer who used the bill history or bill analysis tools achieved some savings of 474 kWh per year (1.30*365). Customer who used the home analyzer achieved some savings of 449 kWh per year (1.23*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 584 kWh per year (1.60*365). Customers reached level 2 achieved additional saving of 449 kWh per year and in total saved 1,033 kWh per year (the saving estimate is the total saving of level 2). Getting to level 3 results in annual saving of 431 kWh but it is not statistically significant, i.e. the saving is not significantly different from zero; also note that level 3 customers achieved no saving in 2013. However, it is noteworthy that besides the existing level 3 customers; only 5 additional accounts achieved level 3 in 2014. The saving estimates associated with various levels are consistent with results from last year because they fall within the confidence interval of program year 2013.

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 692 kWh. Customers who used CSR achieved the highest savings level of 1,219 kWh. Customer who used the bill history or bill analysis tools achieved some savings (474 kWh). Customers who used Home Analyzer saved 449 kWh.

As one would expect, the higher the level the customer achieves, the higher the resulting savings. Customers reached level 2 achieved the highest saving at a total of 1,033 kWh per year .Getting to level 3 does not lift savings from level 2 although it is noteworthy that only 5 accounts that reached level 3 in 2014 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 692 kWh / year per participant based on the sample of 2,829 participating accounts.

APPENDIX:

Estimated Overall Model

Number of Observations Read	176204
Number of Observations Used	176204

Dependent Variable: kwhd

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6777	150869372.3	22262.0	43.65	<.0001
Error	169426	86404170.9	510.0		
Corrected Total	176203	237273543.2			

R-Square	Coeff Var	Root MSE	kwhd Mean
0.635846	50.08228	22.58278	45.09135

Source	DF	Type I SS	Mean Square	F Value	Pr > F
ConcatID	6682	123202847.9	18438.0	36.15	<.0001
monthly_avg_*monthID	83	27590711.7	332418.2	651.82	<.0001
APPLpt	1	1.1	1.1	0.00	0.9638
INSUpt	1	350.7	350.7	0.69	0.4070
HT94pt	1	1957.5	1957.5	3.84	0.0501
CLRNpt	1	31735.3	31735.3	62.23	<.0001
CLRRpt	1	4663.1	4663.1	9.14	0.0025
CTRLpt	1	21.5	21.5	0.04	0.8372
ECMpt	1	187.3	187.3	0.37	0.5445
HTRpt	1	984.5	984.5	1.93	0.1647
WHSSpt	1	5325.1	5325.1	10.44	0.0012
CECpt	1	923.4	923.4	1.81	0.1784
Opower	1	856.6	856.6	1.68	0.1950
overall_BA	1	28806.6	28806.6	56.49	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
monthly_avg_*monthID	83	27143560.23	327030.85	641.26	<.0001
APPLpt	1	1.23	1.23	0.00	0.9608
INSUpt	1	290.33	290.33	0.57	0.4505
HT94pt	1	1418.16	1418.16	2.78	0.0954
CLRNpt	1	31144.83	31144.83	61.07	<.0001
CLRRpt	1	4551.46	4551.46	8.92	0.0028
CTRLpt	1	114.16	114.16	0.22	0.6361
ECMpt	1	224.61	224.61	0.44	0.5069
HTRpt	1	829.89	829.89	1.63	0.2021
WHSSpt	1	5726.36	5726.36	11.23	0.0008
CECpt	1	1037.65	1037.65	2.03	0.1537
Opower	1	508.63	508.63	1.00	0.3180
overall_BA	1	28806.64	28806.64	56.49	<.0001

Parameter	Estimate	Standard Error	t Value	Pr > |t|
monthly_avg_*monthID 20080201	-0.76134076	0.06538085	-11.64	<.0001

monthly_avg_*monthID	20080301	-0.64139076	0.02687451	-23.87	<.0001
monthly_avg_*monthID	20080401	-0.74287770	0.01602020	-46.37	<.0001
monthly_avg_*monthID	20080501	-0.72836293	0.01204986	-60.45	<.0001
monthly_avg_*monthID	20080601	-0.66447960	0.01007899	-65.93	<.0001
monthly_avg_*monthID	20080701	-0.52488447	0.00901124	-58.25	<.0001
monthly_avg_*monthID	20080801	-0.53769034	0.00910415	-59.06	<.0001
monthly_avg_*monthID	20080901	-0.70044608	0.01054732	-66.41	<.0001
monthly_avg_*monthID	20081001	-0.74139855	0.01335883	-55.50	<.0001
monthly_avg_*monthID	20081101	-0.61283261	0.01966041	-31.17	<.0001
monthly_avg_*monthID	20081201	-0.00417551	0.08361205	-0.05	0.9602
monthly_avg_*monthID	20090101	-0.41471956	0.12770942	-3.25	0.0012
monthly_avg_*monthID	20090201	-0.70892130	0.04506491	-15.73	<.0001
monthly_avg_*monthID	20090301	-0.55007699	0.02401568	-22.90	<.0001
monthly_avg_*monthID	20090401	-0.70291218	0.01466820	-47.92	<.0001
monthly_avg_*monthID	20090501	-0.70219308	0.01133405	-61.95	<.0001
monthly_avg_*monthID	20090601	-0.64260998	0.00975206	-65.89	<.0001
monthly_avg_*monthID	20090701	-0.59366186	0.00929723	-63.85	<.0001
monthly_avg_*monthID	20090801	-0.59005507	0.00928254	-63.57	<.0001
monthly_avg_*monthID	20090901	-0.61301969	0.00950288	-64.51	<.0001
monthly_avg_*monthID	20091001	-0.73349214	0.01498011	-48.96	<.0001

Parameter	Estimate	Standard Error	t Value	Pr > |t|
monthly_avg_*monthID 20091101	-0.58774842	0.01564960	-37.56	<.0001
monthly_avg_*monthID 20091201	-0.20929746	0.05405854	-3.87	0.0001
monthly_avg_*monthID 20100101	-0.12911399	0.06762301	-1.91	0.0562
monthly_avg_*monthID 20100201	-1.02064983	0.05254481	-19.42	<.0001
monthly_avg_*monthID 20100301	-0.60419176	0.01713285	-35.27	<.0001
monthly_avg_*monthID 20100401	-0.70511194	0.01205253	-58.50	<.0001
monthly_avg_*monthID 20100501	-0.68593443	0.01078178	-63.62	<.0001
monthly_avg_*monthID 20100601	-0.60688364	0.00940100	-64.56	<.0001
monthly_avg_*monthID 20100701	-0.46442917	0.00847581	-54.79	<.0001
monthly_avg_*monthID 20100801	-0.47271876	0.00844523	-55.97	<.0001
monthly_avg_*monthID 20100901	-0.72022404	0.01074096	-67.05	<.0001
monthly_avg_*monthID 20101001	-0.71588142	0.01204608	-59.43	<.0001
monthly_avg_*monthID 20101101	-0.64703798	0.01955827	-33.08	<.0001
monthly_avg_*monthID 20101201	-0.16401917	0.05340088	-3.07	0.0021
monthly_avg_*monthID 20110101	-0.15579166	0.11887627	-1.31	0.1900
monthly_avg_*monthID 20110201	-0.81120533	0.04799784	-16.90	<.0001
monthly_avg_*monthID 20110301	-0.61529788	0.02596187	-23.70	<.0001
monthly_avg_*monthID 20110401	-0.66729173	0.01399410	-47.68	<.0001
monthly_avg_*monthID 20110501	-0.67917556	0.01084551	-62.62	<.0001
monthly_avg_*monthID 20110601	-0.59724517	0.00910833	-65.57	<.0001
monthly_avg_*monthID 20110701	-0.42413300	0.00808997	-52.43	<.0001
monthly_avg_*monthID 20110801	-0.49263144	0.00856334	-57.53	<.0001
monthly_avg_*monthID 20110901	-0.68859959	0.01014967	-67.84	<.0001
monthly_avg_*monthID 20111001	-0.70331393	0.01155616	-60.86	<.0001
monthly_avg_*monthID 20111101	-0.69613281	0.01776049	-39.20	<.0001
monthly_avg_*monthID 20111201	-0.50292658	0.02436613	-20.64	<.0001
monthly_avg_*monthID 20120101	-0.51177701	0.03092136	-16.55	<.0001
monthly_avg_*monthID 20120201	-0.74887342	0.02768330	-27.05	<.0001
monthly_avg_*monthID 20120301	-0.64344940	0.01426545	-45.11	<.0001
monthly_avg_*monthID 20120401	-0.78479061	0.01269225	-61.83	<.0001
monthly_avg_*monthID 20120501	-0.68267737	0.01007991	-67.73	<.0001
monthly_avg_*monthID 20120601	-0.54777233	0.00868656	-63.06	<.0001
monthly_avg_*monthID 20120701	-0.39266764	0.00775369	-50.64	<.0001
monthly_avg_*monthID 20120801	-0.52888231	0.00869392	-60.83	<.0001
monthly_avg_*monthID 20120901	-0.68512254	0.01010918	-67.77	<.0001
monthly_avg_*monthID 20121001	-0.75369404	0.01368072	-55.09	<.0001
monthly_avg_*monthID 20121101	-0.76693785	0.01957436	-39.18	<.0001
monthly_avg_*monthID 20121201	-2.11561389	0.04115370	-51.41	<.0001
monthly_avg_*monthID 20130101	-1.21714213	0.06161849	-19.75	<.0001
monthly_avg_*monthID 20130201	-0.93325055	0.05178056	-18.02	<.0001
monthly_avg_*monthID 20130301	-0.72943019	0.03339666	-21.84	<.0001
monthly_avg_*monthID 20130401	-0.75975412	0.01893697	-40.12	<.0001
monthly_avg_*monthID 20130501	-0.66690524	0.01151201	-57.93	<.0001
monthly_avg_*monthID 20130601	-0.58193104	0.00968647	-60.08	<.0001
monthly_avg_*monthID 20130701	-0.48671848	0.00902071	-53.96	<.0001
monthly_avg_*monthID 20130801	-0.50461017	0.00910987	-55.39	<.0001

Parameter	Estimate	Standard Error	t Value	Pr > |t|
monthly_avg_*monthID 20130901	-0.60925792	0.01017823	-59.86	<.0001
monthly_avg_*monthID 20131001	-0.73539683	0.01447046	-50.82	<.0001
monthly_avg_*monthID 20131101	-0.72182052	0.02353444	-30.67	<.0001
monthly_avg_*monthID 20131201	-4.07500327	0.12252041	-33.26	<.0001
monthly_avg_*monthID 20140101	0.41436122	0.15625228	2.65	0.0080
monthly_avg_*monthID 20140201	0.52122327	0.16667998	3.13	0.0018
monthly_avg_*monthID 20140301	-0.08558284	0.04231260	-2.02	0.0431
monthly_avg_*monthID 20140401	-0.50042962	0.02302046	-21.74	<.0001
monthly_avg_*monthID 20140501	-0.51731914	0.01618406	-31.96	<.0001
monthly_avg_*monthID 20140601	-0.49656234	0.01377542	-36.05	<.0001
monthly_avg_*monthID 20140701	-0.43273893	0.01338087	-32.34	<.0001
monthly_avg_*monthID 20140801	-0.42383011	0.01443985	-29.35	<.0001
monthly_avg_*monthID 20140901	-0.55546448	0.01682455	-33.02	<.0001
monthly_avg_*monthID 20141001	-0.55209085	0.02144167	-25.75	<.0001
monthly_avg_*monthID 20141101	-0.40430314	0.04922311	-8.21	<.0001
monthly_avg_*monthID 20141201	-1.60548066	0.06149227	-26.11	<.0001
APPLpt	-0.08975622	1.82423400	-0.05	0.9608
INSUpt	-2.32371123	3.07971194	-0.75	0.4505
HT94pt	-1.50403485	0.90192982	-1.67	0.0954
CLRNpt	66.40459291	8.49732895	7.81	<.0001
CLRRpt	-11.73796013	3.92911508	-2.99	0.0028
CTRLpt	0.32027229	0.67692765	0.47	0.6361
ECMpt	-10.77868535	16.24155949	-0.66	0.5069
HTRpt	13.86081830	10.86563666	1.28	0.2021
WHSSpt	-2.95909986	0.88307519	-3.35	0.0008
CECpt	2.98859962	2.09517318	1.43	0.1537
Opower	-0.25844140	0.25878444	-1.00	0.3180
overall_BA	-1.89492887	0.25212964	-7.52	<.0001

Estimated Tool Use Model

Number of Observations Read	176204
Number of Observations Used	176204

Dependent Variable: kwhd

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6779	150881079.9	22257.1	43.65	<.0001
Error	169424	86392463.3	509.9		
Corrected Total	176203	237273543.2			

R-Square	Coeff Var	Root MSE	kwhd Mean
0.635895	50.07918	22.58138	45.09135

Source	DF	Type I SS	Mean Square	F Value	Pr > F
ConcatID	6682	123202847.9	18438.0	36.16	<.0001
monthly_avg_*monthID	83	27590711.7	332418.2	651.90	<.0001
APPLpt	1	1.1	1.1	0.00	0.9638
INSUpt	1	350.7	350.7	0.69	0.4069
HT94pt	1	1957.5	1957.5	3.84	0.0501
CLRNpt	1	31735.3	31735.3	62.24	<.0001
CLRRpt	1	4663.1	4663.1	9.14	0.0025
CTRLpt	1	21.5	21.5	0.04	0.8371
ECMpt	1	187.3	187.3	0.37	0.5445
HTRpt	1	984.5	984.5	1.93	0.1647
WHSSpt	1	5325.1	5325.1	10.44	0.0012
CECpt	1	923.4	923.4	1.81	0.1784
Opower	1	856.6	856.6	1.68	0.1949
Used_Home_Analyzer	1	20210.4	20210.4	39.63	<.0001
used_BA	1	10744.5	10744.5	21.07	<.0001
used_CSR	1	9559.4	9559.4	18.75	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
monthly_avg_*monthID	83	27153047.83	327145.15	641.56	<.0001
APPLpt	1	4.95	4.95	0.01	0.9215
INSUpt	1	183.79	183.79	0.36	0.5483
HT94pt	1	1387.23	1387.23	2.72	0.0991
CLRNpt	1	31088.79	31088.79	60.97	<.0001
CLRRpt	1	4413.07	4413.07	8.65	0.0033
CTRLpt	1	167.23	167.23	0.33	0.5669
ECMpt	1	214.70	214.70	0.42	0.5164
HTRpt	1	826.82	826.82	1.62	0.2029
WHSSpt	1	5726.68	5726.68	11.23	0.0008
CECpt	1	1181.80	1181.80	2.32	0.1279
Opower	1	488.82	488.82	0.96	0.3275
Used_Home_Analyzer	1	5983.83	5983.83	11.73	0.0006
used_BA	1	9939.98	9939.98	19.49	<.0001
used_CSR	1	9559.35	9559.35	18.75	<.0001

Parameter		Estimate	Standard Error	t Value	Pr > |t|
monthly_avg_*monthID	20080201	-0.77100033	0.06541954	-11.79	<.0001
monthly_avg_*monthID	20080301	-0.64530702	0.02689046	-24.00	<.0001
monthly_avg_*monthID	20080401	-0.74524797	0.01602963	-46.49	<.0001
monthly_avg_*monthID	20080501	-0.73017826	0.01205709	-60.56	<.0001
monthly_avg_*monthID	20080601	-0.66594400	0.01008486	-66.03	<.0001
monthly_avg_*monthID	20080701	-0.52623466	0.00901673	-58.36	<.0001
monthly_avg_*monthID	20080801	-0.53909122	0.00911002	-59.18	<.0001
monthly_avg_*monthID	20080901	-0.70207762	0.01055413	-66.52	<.0001
monthly_avg_*monthID	20081001	-0.74348042	0.01336763	-55.62	<.0001
monthly_avg_*monthID	20081101	-0.61584601	0.01967324	-31.30	<.0001
monthly_avg_*monthID	20081201	-0.01717312	0.08366708	-0.21	0.8374
monthly_avg_*monthID	20090101	-0.43057954	0.12776066	-3.37	0.0008
monthly_avg_*monthID	20090201	-0.71561255	0.04509662	-15.87	<.0001
monthly_avg_*monthID	20090301	-0.55315970	0.02403644	-23.01	<.0001
monthly_avg_*monthID	20090401	-0.70475308	0.01468081	-48.01	<.0001
monthly_avg_*monthID	20090501	-0.70358299	0.01134331	-62.03	<.0001
monthly_avg_*monthID	20090601	-0.64382865	0.00976038	-65.96	<.0001
monthly_avg_*monthID	20090701	-0.59487339	0.00930528	-63.93	<.0001
monthly_avg_*monthID	20090801	-0.59129553	0.00929074	-63.64	<.0001
monthly_avg_*monthID	20090901	-0.61425116	0.00951128	-64.58	<.0001
monthly_avg_*monthID	20091001	-0.73548122	0.01499407	-49.05	<.0001
monthly_avg_*monthID	20091101	-0.58970618	0.01566311	-37.65	<.0001
monthly_avg_*monthID	20091201	-0.21617754	0.05410099	-4.00	<.0001
monthly_avg_*monthID	20100101	-0.13736913	0.06767022	-2.03	0.0424
monthly_avg_*monthID	20100201	-1.02715249	0.05257790	-19.54	<.0001
monthly_avg_*monthID	20100301	-0.60632403	0.01714282	-35.37	<.0001
monthly_avg_*monthID	20100401	-0.70664748	0.01205929	-58.60	<.0001
monthly_avg_*monthID	20100501	-0.68725407	0.01078722	-63.71	<.0001
monthly_avg_*monthID	20100601	-0.60805356	0.00940587	-64.65	<.0001
monthly_avg_*monthID	20100701	-0.46543816	0.00847983	-54.89	<.0001
monthly_avg_*monthID	20100801	-0.47370054	0.00844884	-56.07	<.0001
monthly_avg_*monthID	20100901	-0.72149868	0.01074540	-67.14	<.0001
monthly_avg_*monthID	20101001	-0.71726458	0.01205064	-59.52	<.0001
monthly_avg_*monthID	20101101	-0.64925729	0.01956494	-33.18	<.0001
monthly_avg_*monthID	20101201	-0.17006143	0.05341643	-3.18	0.0015
monthly_avg_*monthID	20110101	-0.16884596	0.11890333	-1.42	0.1556
monthly_avg_*monthID	20110201	-0.81640800	0.04800618	-17.01	<.0001
monthly_avg_*monthID	20110301	-0.61792812	0.02596594	-23.80	<.0001
monthly_avg_*monthID	20110401	-0.66867689	0.01399564	-47.78	<.0001
monthly_avg_*monthID	20110501	-0.68026211	0.01084644	-62.72	<.0001
monthly_avg_*monthID	20110601	-0.59813849	0.00910866	-65.67	<.0001
monthly_avg_*monthID	20110701	-0.42491903	0.00809200	-52.51	<.0001
monthly_avg_*monthID	20110801	-0.49346507	0.00856516	-57.61	<.0001
monthly_avg_*monthID	20110901	-0.68958092	0.01015146	-67.93	<.0001
monthly_avg_*monthID	20111001	-0.70434568	0.01155770	-60.94	<.0001
monthly_avg_*monthID	20111101	-0.69769609	0.01776209	-39.28	<.0001
monthly_avg_*monthID	20111201	-0.50507790	0.02436724	-20.73	<.0001
monthly_avg_*monthID	20120101	-0.51437117	0.03092212	-16.63	<.0001
monthly_avg_*monthID	20120201	-0.75081055	0.02768180	-27.12	<.0001
monthly_avg_*monthID	20120301	-0.64446111	0.01426340	-45.18	<.0001
monthly_avg_*monthID	20120401	-0.78580609	0.01268986	-61.92	<.0001
monthly_avg_*monthID	20120501	-0.68345834	0.01007771	-67.82	<.0001
monthly_avg_*monthID	20120601	-0.54847343	0.00868459	-63.15	<.0001
monthly_avg_*monthID	20120701	-0.39326396	0.00775161	-50.73	<.0001
monthly_avg_*monthID	20120801	-0.52951752	0.00869109	-60.93	<.0001
monthly_avg_*monthID	20120901	-0.68589367	0.01010533	-67.87	<.0001
monthly_avg_*monthID	20121001	-0.75476291	0.01367567	-55.19	<.0001
monthly_avg_*monthID	20121101	-0.76845762	0.01956587	-39.28	<.0001
monthly_avg_*monthID	20121201	-2.11496419	0.04114034	-51.41	<.0001
monthly_avg_*monthID	20130101	-1.20836346	0.06165323	-19.60	<.0001
monthly_avg_*monthID	20130201	-0.92565156	0.05181413	-17.86	<.0001
monthly_avg_*monthID	20130301	-0.72440799	0.03342017	-21.68	<.0001
monthly_avg_*monthID	20130401	-0.75699270	0.01894924	-39.95	<.0001
monthly_avg_*monthID	20130501	-0.66520847	0.01151971	-57.75	<.0001
monthly_avg_*monthID	20130601	-0.58050103	0.00969290	-59.89	<.0001
monthly_avg_*monthID	20130701	-0.48535190	0.00902688	-53.77	<.0001

monthly_avg_*monthID 20130801	-0.50324636	0.00911603	-55.20	<.0001
monthly_avg_*monthID 20130901	-0.60775576	0.01018489	-59.67	<.0001
monthly_avg_*monthID 20131001	-0.73319545	0.01448049	-50.63	<.0001
monthly_avg_*monthID 20131101	-0.71817310	0.02355125	-30.49	<.0001
monthly_avg_*monthID 20131201	-4.05845371	0.12258246	-33.11	<.0001
monthly_avg_*monthID 20140101	0.43599292	0.15632775	2.79	0.0053
monthly_avg_*monthID 20140201	0.54521655	0.16676423	3.27	0.0011
monthly_avg_*monthID 20140301	-0.07822597	0.04234759	-1.85	0.0647
monthly_avg_*monthID 20140401	-0.49624199	0.02304069	-21.54	<.0001
monthly_avg_*monthID 20140501	-0.51444172	0.01619796	-31.76	<.0001
monthly_avg_*monthID 20140601	-0.49406797	0.01378795	-35.83	<.0001
monthly_avg_*monthID 20140701	-0.43034018	0.01339322	-32.13	<.0001
monthly_avg_*monthID 20140801	-0.42144744	0.01445160	-29.16	<.0001
monthly_avg_*monthID 20140901	-0.55280146	0.01683741	-32.83	<.0001
monthly_avg_*monthID 20141001	-0.54864641	0.02145845	-25.57	<.0001
monthly_avg_*monthID 20141101	-0.39649678	0.04926343	-8.05	<.0001
monthly_avg_*monthID 20141201	-1.59701005	0.06152720	-25.96	<.0001
APPLpt	-0.17976288	1.82427713	-0.10	0.9215
INSUpt	-1.84926878	3.08025956	-0.60	0.5483
HT94pt	-1.48747530	0.90183289	-1.65	0.0991
CLRNpt	66.34496109	8.49682134	7.81	<.0001
CLRRpt	-11.56018630	3.92956909	-2.94	0.0033
CTRLpt	0.38782201	0.67721072	0.57	0.5669
ECMpt	-10.53837589	16.24080536	-0.65	0.5164
HTRpt	13.83517872	10.86496841	1.27	0.2029
WHSSpt	-2.95920412	0.88302657	-3.35	0.0008
CECpt	3.19032530	2.09562507	1.52	0.1279
Opower	-0.25343398	0.25884435	-0.98	0.3275
Used_Home_Analyzer	-1.23131845	0.35944404	-3.43	0.0006
used_BA	-1.29915400	0.29425122	-4.42	<.0001
used_CSR	-3.33673289	0.77065079	-4.33	<.0001

Estimated Achieved Level Model

Number of Observations Read	176204
Number of Observations Used	176204

Dependent Variable: kwhd

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6779	150867858.8	22255.2	43.64	<.0001
Error	169424	86405684.3	510.0		
Corrected Total	176203	237273543.2			

R-Square	Coeff Var	Root MSE	kwhd Mean
0.635839	50.08301	22.58311	45.09135

Source	DF	Type I SS	Mean Square	F Value	Pr > F
ConcatID	6682	123202847.9	18438.0	36.15	<.0001
monthly_avg_*monthID	83	27590711.7	332418.2	651.80	<.0001
APPLpt	1	1.1	1.1	0.00	0.9638
INSUpt	1	350.7	350.7	0.69	0.4070
HT94pt	1	1957.5	1957.5	3.84	0.0501
CLRNpt	1	31735.3	31735.3	62.23	<.0001
CLRRpt	1	4663.1	4663.1	9.14	0.0025
CTRLpt	1	21.5	21.5	0.04	0.8372
ECMpt	1	187.3	187.3	0.37	0.5445
HTRpt	1	984.5	984.5	1.93	0.1647
WHSSpt	1	5325.1	5325.1	10.44	0.0012
CECpt	1	923.4	923.4	1.81	0.1784
Opower	1	856.6	856.6	1.68	0.1950
l1	1	6018.7	6018.7	11.80	0.0006
l2	1	20372.9	20372.9	39.95	<.0001
l3	1	901.6	901.6	1.77	0.1837

Source	DF	Type III SS	Mean Square	F Value	Pr > F
monthly_avg_*monthID	83	27168505.70	327331.39	641.83	<.0001
APPLpt	1	1.42	1.42	0.00	0.9579
INSUpt	1	226.80	226.80	0.44	0.5049
HT94pt	1	1573.81	1573.81	3.09	0.0790
CLRNpt	1	31067.81	31067.81	60.92	<.0001
CLRRpt	1	4571.68	4571.68	8.96	0.0028
CTRLpt	1	142.09	142.09	0.28	0.5976
ECMpt	1	235.21	235.21	0.46	0.4971
HTRpt	1	830.28	830.28	1.63	0.2020
WHSSpt	1	5837.40	5837.40	11.45	0.0007
CECpt	1	1010.64	1010.64	1.98	0.1592
Opower	1	481.34	481.34	0.94	0.3313
l1	1	10589.59	10589.59	20.76	<.0001
l2	1	21126.99	21126.99	41.43	<.0001
l3	1	901.55	901.55	1.77	0.1837

Parameter		Estimate	Standard Error	t Value	Pr > |t|
monthly_avg_*monthID	20080201	-0.75523159	0.06535188	-11.56	<.0001
monthly_avg_*monthID	20080301	-0.63867818	0.02686088	-23.78	<.0001
monthly_avg_*monthID	20080401	-0.74118739	0.01601131	-46.29	<.0001
monthly_avg_*monthID	20080501	-0.72707175	0.01204309	-60.37	<.0001
monthly_avg_*monthID	20080601	-0.66341054	0.01007334	-65.86	<.0001
monthly_avg_*monthID	20080701	-0.52391649	0.00900611	-58.17	<.0001
monthly_avg_*monthID	20080801	-0.53671447	0.00909882	-58.99	<.0001
monthly_avg_*monthID	20080901	-0.69927734	0.01054087	-66.34	<.0001
monthly_avg_*monthID	20081001	-0.73988524	0.01335019	-55.42	<.0001
monthly_avg_*monthID	20081101	-0.61060708	0.01964765	-31.08	<.0001
monthly_avg_*monthID	20081201	0.00380157	0.08357202	0.05	0.9637
monthly_avg_*monthID	20090101	-0.40716937	0.12768462	-3.19	0.0014
monthly_avg_*monthID	20090201	-0.70434019	0.04504025	-15.64	<.0001
monthly_avg_*monthID	20090301	-0.54819303	0.02400910	-22.83	<.0001
monthly_avg_*monthID	20090401	-0.70177975	0.01466465	-47.86	<.0001
monthly_avg_*monthID	20090501	-0.70132479	0.01133116	-61.89	<.0001
monthly_avg_*monthID	20090601	-0.64198836	0.00975105	-65.84	<.0001
monthly_avg_*monthID	20090701	-0.59320970	0.00929741	-63.80	<.0001
monthly_avg_*monthID	20090801	-0.58970652	0.00928357	-63.52	<.0001
monthly_avg_*monthID	20090901	-0.61276923	0.00950481	-64.47	<.0001
monthly_avg_*monthID	20091001	-0.73331008	0.01498494	-48.94	<.0001
monthly_avg_*monthID	20091101	-0.58773551	0.01565436	-37.54	<.0001
monthly_avg_*monthID	20091201	-0.20999811	0.05407729	-3.88	0.0001
monthly_avg_*monthID	20100101	-0.13016238	0.06764594	-1.92	0.0543
monthly_avg_*monthID	20100201	-1.02203988	0.05256528	-19.44	<.0001
monthly_avg_*monthID	20100301	-0.60470404	0.01713926	-35.28	<.0001
monthly_avg_*monthID	20100401	-0.70566932	0.01205754	-58.53	<.0001
monthly_avg_*monthID	20100501	-0.68647181	0.01078629	-63.64	<.0001
monthly_avg_*monthID	20100601	-0.60738525	0.00940505	-64.58	<.0001
monthly_avg_*monthID	20100701	-0.46489818	0.00847958	-54.83	<.0001
monthly_avg_*monthID	20100801	-0.47317802	0.00844875	-56.01	<.0001
monthly_avg_*monthID	20100901	-0.72091447	0.01074581	-67.09	<.0001
monthly_avg_*monthID	20101001	-0.71675014	0.01205166	-59.47	<.0001
monthly_avg_*monthID	20101101	-0.64843774	0.01956664	-33.14	<.0001
monthly_avg_*monthID	20101201	-0.16772298	0.05342083	-3.14	0.0017
monthly_avg_*monthID	20110101	-0.16432722	0.11891357	-1.38	0.1670
monthly_avg_*monthID	20110201	-0.81504612	0.04801321	-16.98	<.0001
monthly_avg_*monthID	20110301	-0.61794842	0.02597010	-23.79	<.0001
monthly_avg_*monthID	20110401	-0.66876472	0.01399768	-47.78	<.0001
monthly_avg_*monthID	20110501	-0.68033862	0.01084798	-62.72	<.0001
monthly_avg_*monthID	20110601	-0.59829420	0.00911002	-65.67	<.0001
monthly_avg_*monthID	20110701	-0.42510499	0.00809298	-52.53	<.0001
monthly_avg_*monthID	20110801	-0.49373413	0.00856629	-57.64	<.0001
monthly_avg_*monthID	20110901	-0.68991894	0.01015280	-67.95	<.0001
monthly_avg_*monthID	20111001	-0.70480447	0.01155926	-60.97	<.0001
monthly_avg_*monthID	20111101	-0.69839379	0.01776428	-39.31	<.0001
monthly_avg_*monthID	20111201	-0.50611984	0.02437022	-20.77	<.0001
monthly_avg_*monthID	20120101	-0.51576606	0.03092549	-16.68	<.0001
monthly_avg_*monthID	20120201	-0.75287229	0.02768326	-27.20	<.0001
monthly_avg_*monthID	20120301	-0.64587428	0.01426319	-45.28	<.0001
monthly_avg_*monthID	20120401	-0.78720687	0.01268849	-62.04	<.0001
monthly_avg_*monthID	20120501	-0.68461499	0.01007657	-67.94	<.0001
monthly_avg_*monthID	20120601	-0.54953884	0.00868313	-63.29	<.0001
monthly_avg_*monthID	20120701	-0.39427891	0.00774993	-50.88	<.0001
monthly_avg_*monthID	20120801	-0.53081229	0.00868861	-61.09	<.0001
monthly_avg_*monthID	20120901	-0.68759210	0.01010098	-68.07	<.0001
monthly_avg_*monthID	20121001	-0.75709162	0.01366920	-55.39	<.0001
monthly_avg_*monthID	20121101	-0.77192224	0.01955556	-39.47	<.0001
monthly_avg_*monthID	20121201	-2.12476871	0.04109789	-51.70	<.0001
monthly_avg_*monthID	20130101	-1.22719517	0.06155244	-19.94	<.0001
monthly_avg_*monthID	20130201	-0.94206220	0.05171537	-18.22	<.0001
monthly_avg_*monthID	20130301	-0.73553368	0.03334791	-22.06	<.0001
monthly_avg_*monthID	20130401	-0.76369207	0.01890216	-40.40	<.0001
monthly_avg_*monthID	20130501	-0.66936885	0.01148933	-58.26	<.0001
monthly_avg_*monthID	20130601	-0.58396254	0.00966744	-60.41	<.0001
monthly_avg_*monthID	20130701	-0.48865173	0.00900235	-54.28	<.0001

monthly_avg_*monthID 20130801	-0.50657423	0.00909119	-55.72	<.0001
monthly_avg_*monthID 20130901	-0.61144325	0.01015735	-60.20	<.0001
monthly_avg_*monthID 20131001	-0.73842507	0.01444159	-51.13	<.0001
monthly_avg_*monthID 20131101	-0.72662832	0.02348886	-30.94	<.0001
monthly_avg_*monthID 20131201	-4.08851828	0.12244836	-33.39	<.0001
monthly_avg_*monthID 20140101	0.41230433	0.15628646	2.64	0.0083
monthly_avg_*monthID 20140201	0.52028763	0.16673106	3.12	0.0018
monthly_avg_*monthID 20140301	-0.08621828	0.04233382	-2.04	0.0417
monthly_avg_*monthID 20140401	-0.50044668	0.02303579	-21.72	<.0001
monthly_avg_*monthID 20140501	-0.51724296	0.01619661	-31.94	<.0001
monthly_avg_*monthID 20140601	-0.49651174	0.01378640	-36.01	<.0001
monthly_avg_*monthID 20140701	-0.43281358	0.01339145	-32.32	<.0001
monthly_avg_*monthID 20140801	-0.42369546	0.01445395	-29.31	<.0001
monthly_avg_*monthID 20140901	-0.55530647	0.01684168	-32.97	<.0001
monthly_avg_*monthID 20141001	-0.55194436	0.02146459	-25.71	<.0001
monthly_avg_*monthID 20141101	-0.40449595	0.04927665	-8.21	<.0001
monthly_avg_*monthID 20141201	-1.60621051	0.06154058	-26.10	<.0001
APPLpt	-0.09641827	1.82444191	-0.05	0.9579
INSUpt	-2.05614500	3.08331787	-0.67	0.5049
HT94pt	-1.58415513	0.90178922	-1.76	0.0790
CLRNpt	66.32278040	8.49749791	7.80	<.0001
CLRRpt	-11.76482389	3.92944484	-2.99	0.0028
CTRLpt	0.35745961	0.67722258	0.53	0.5976
ECMpt	-11.03066107	16.24253469	-0.68	0.4971
HTRpt	13.86411177	10.86581288	1.28	0.2020
WHSSpt	-2.98808765	0.88321663	-3.38	0.0007
CECpt	2.94956970	2.09528517	1.41	0.1592
Opower	-0.25147369	0.25885021	-0.97	0.3313
l1	-1.59721828	0.35051643	-4.56	<.0001
l2	-2.82948768	0.43961516	-6.44	<.0001
l3	-1.18332124	0.89000161	-1.33	0.1837

Otter Tail Home Energy Reports Program: 2014 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 5,000 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 4,000 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.
- In July 2014, approximately 3,300 additional 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, 1994 customers received reports. At the end of 2014, 3,171 customers remained active for carryover into 2015

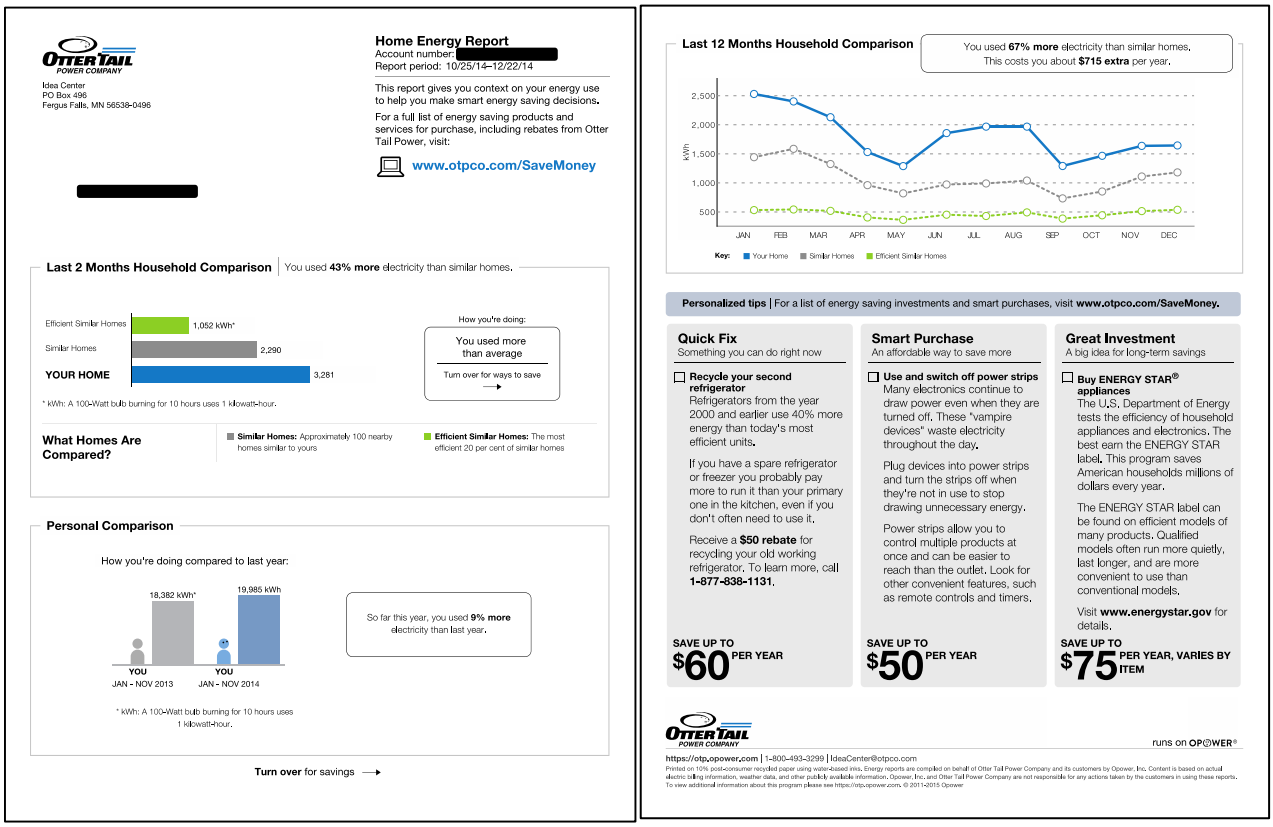
Each Home Energy Report contained various personalized components, including:

- 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.

Updates to the Home Energy Report template were made in 2014 including:

- The “Johnson Box” in the upper right-hand corner of the report directs customers to rebate and incentive programs at Otter Tail website (https://www.otpco.com/Savemoney)
- The header above the personalized tips section on the back of the report directs customers to rebate and incentive programs at Otter Tail website (https://www.otpco.com/Savemoney)

Figure 1: Example of an Otter Tail Home Energy Report



In 2014, a total of 31,439 households received reports. 27,770 participants remained active at the end of 2014. Of these participants, 19,684 were in the original pilot, 3,301 were of the 2012 refill, 3,022 were of the 2013 refill, and 1,693 were of the 2014 refill.

Cumulatively, 62 customers chose to opt out of the program in 2014, which corresponds to an opt-out rate of 0.2%, 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, 3,677 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 2014.

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

Month	Account Closures	Opt-out
January 2014	98	3
February 2014	92	10
March 2014	114	7
April 2014	115	3
May 2014	128	2
June 2014	189	5
July 2014	198	4
August 2014	156	3
September 2014	210	2
October 2014	130	3
November 2014	130	1
December 2014	84	2
2014 Total	***1,644***	***45***

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

Month	Account Closures	Opt-out
January 2014	54	1
February 2014	34	3
March 2014	44	0
April 2014	56	1
May 2014	96	0
June 2014	111	1
July 2014	64	0
August 2014	69	0
September 2014	59	1
October 2014	51	2
November 2014	41	0
December 2014	32	3
2014 Total	***711***	***12***

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

Month	Account Closures	Opt-out
January 2014	94	2
February 2014	67	1
March 2014	91	1
April 2014	83	1
May 2014	105	0
June 2014	134	0
July 2014	95	0
August 2014	77	0
September 2014	97	0
October 2014	83	0
November 2014	52	0
December 2014	43	0
2014 Total	***1,021***	***5***

Figure 6: 2014 Refill Monthly Opt-outs and Account Closures

Month	Account Closures	Opt-out
July 2014	28	0
August 2014	68	0
September 2014	82	0
October 2014	52	0
November 2014	38	0
December 2014	33	0
2013 Total	***301***	***0***

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, to the extent available from a third-party vendor, data about household parcels, including house size, age, and value, heating and cooling type as well as pool and hot tub data. 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 Energy 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 in the refill groups 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 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

[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).

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:

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

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 2014 were 5,103 MWhs.

Over the life of the program, the initial legacy customers delivered a reduction in electricity consumption of 14,945 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 716.27 kWh saved per household for the 42-month program measurement period. The maximum monthly percentage savings rate was achieved in June 2012 (3.1%, corresponding to 586 MWh of savings). The average annual energy savings per participant in 2014 was 162.3 kWhs.

Due to the size of the refill population, the group is too little for monthly statitsical 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.

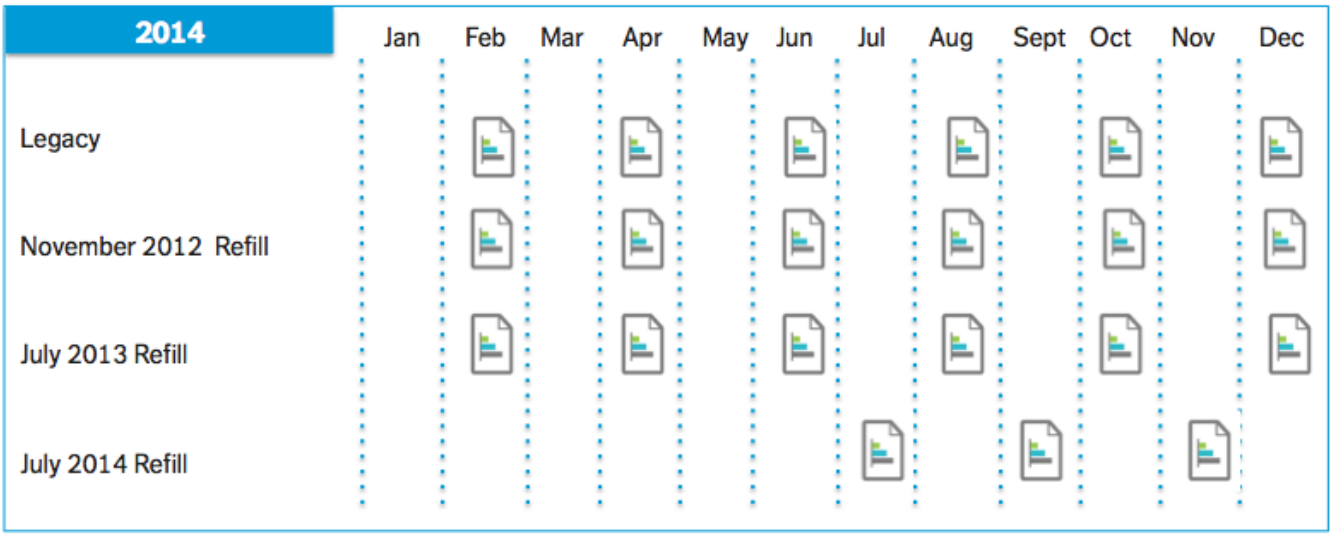
Figure 6: Monthly Electric Savings Impact (through December 31, 2014).

Month	Legacy MWh Savings (Measured)	2012 Refill MWh Savings (Modeled)	2013 Refill MWh Savings (Modeled)	2014 Refill MWh Savings (Modeled)
January 2014	601	35	29	
February 2014	322	31	26	
March 2014	446	34	28	
April 2014	178	33	27	
May 2014	249	33	27	
June 2014	368	31	25	
July 2014	432	31	25	
August 2014	318	31	24	11
September 2014	263	29	23	11
October 2014	320	30	23	11
November 2014	519	28	22	10
December 2014	359	29	22	10
2014 Total	***4,375***	***374***	***302***	***53***

4 Program design

Figure 8 shows the frequency with which Home Energy Reports are sent to customers. Program design was streamlined in 2014 to create a consistent experience across all customer waves. Customers receive, on average, 6 reports per year on a bi-monthly frequency. Customers from the Legacy, November 2012 Refill and July 2013 Refill groups receive reports in February, April, June, August, October and December. Customers newly added during the July 2014 Refill received reports in July, September and November.

Figure 8: Program Design for 2014



OPOWER

Appendix A

Figure 9: Total Households in Program

	Pilot	2012	2013	2014	Cumulative
Jan	21,328	4,012	4,043		**29,383**
Feb	21,230	3,958	3,949		**29,137**
Mar	21,138	3,924	3,882		**28,944**
Apr	21,024	3,880	3,791		**28,695**
May	20,909	3,824	3,708		**28,441**
June	20,781	3,728	3,603		**28,112**
July	20,592	3,617	3,469	1,994	**29,672**
Aug	20,394	3,553	3,374	1,966	**29,287**
Sep	20,238	3,484	3,297	1,898	**28,917**
Oct	20,028	3,425	3,200	1,816	**28,469**
Nov	19,898	3,374	3,117	1,764	**28,153**
Dec	19,768	3,333	3,065	1,726	**27,892**
End of Year	19,684	3,301	3,022	1,693	**27,700**

Appendix C- Project Information Sheets

PROJECT INFORMATION SHEET INDEX

12. # of Projects	42	Status (indicate with "X" below)	
	Project Name	New	Existing
1	Home Insulation (Resd)		x
2	Air Source Heat Pumps - (Resd)		x
3	Geothermal Heat Pumps - (Resd)		x
4	Financing - (Resd)		x
5	Advertising & Education (Resd)		x
6	Water Heater Store and Save (Resd)	x	
7	Air Conditioning Control (Resd)		x
8	Implementation & Training (Resd)		x
9	Be Bright - Change a Light (Resd)		x
10	Refrigeration (C&I)		x
11	Re-Commissioning (C&I)	x	
12	Grants (C&I)		x
13	Lighting (C&I)		x
14	Motors (C&I)		x
15	Compressed Air Audits (C&I)		x
16	Financing - (C&I)		x
17	Air Source Heat Pumps - (C&I)		x
18	Geothermal Heat Pumps - (C&I)		x
19	Implementation & Training (C&I)		x
20	Appliance Recycling (Resd)		x
21	Industrial Focused Efficiency (C&I)	x	
22	House Therapy (LI)		x
23	Advertising & Education (C&I)		x
24	CIP Development (R&D)		x
25	NGEA Assessments (REG)		x
26	CIP Planning	x	
27	Adjustable Speed Drives (C&I)		x
28	Lighting, New Construction (C&I)		x
29	Energy Feedback (Resd)		x
30	PUC Assessments (REG)		x
31	Home Transformer Pilot (Resd)	x	
32	School Kit Pilot (Resd)	x	
33	ECM (Resd)	x	
34	Commercial Design Assistance (C&I)		x
35	Air Conditioning Control (C&I)		x
36	PC Power Supply (C&I)	x	
37	Made in Minnesota Solar Assessment (REG)	x	
38	Town Energy Challenge - Inactive		
39	Company CIP Projects		
40	Business Education - Inactive		
41	Residential Demand Control - Inactive		
42	Accounting Adjustments		
43			
44			
45			
46			
47			
48			
49			
50			

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons1 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Home Insulation (Resd)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$4,000	$1,786	$4,500		$5,000				
24	Utility Administration	$7,800	$3,692	$8,300		$8,800				
25	Evaluation Labor	$2,000	$120	$2,000		$2,000				
26	Advertising & Promotion	$15,700	$16,048	$15,700		$15,700				
27	Participant Incentives	$26,500	$8,830	$26,500		$26,500				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$56,000	$30,476	$57,000	$0	$58,000	$0			
31	**Project Participants**									
32	Total Participants	55	31	55		55				
33	**% of Spending by Customer Segment**									
34	Residential	100%	100%	100%		100%				
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		31%							
42	Budget % (% of Row 30)		31%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency	x	x	x		x				
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization	x	x	x		x				
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	3,364	5,859	3,364		3,364				
58	Annual kWh Saved - Generator	184,998	181,640	184,998		184,998				
59	Cost per Annual kWh Saved	$0.3027	$0.1678	$0.3081		$0.3135				
60	Measure Lifetime (Years)	15	15	15		15				
61	Lifetime kWh savings	2,774,965	2,724,600	2,774,965		2,774,965				
62	Cost per kWh Lifetime	$0.0202	$0.0112	$0.0205		$0.0209				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	1.77	3.20	1.88		1.98				
69	Net present value	$43,262	$66,984	$49,944		$56,862				
70	**Rate Payer**									
71	B/C ratio	0.46	0.33	0.49		0.51				
72	Net present value	($114,445)	($198,565)	($112,473)		($109,968)				
73	**Participant**									
74	B/C ratio	2.64	6.82	2.70		2.76				
75	Net present value	$164,098	$348,903	$170,247		$175,949				
76	**Societal**									
77	B/C ratio	1.16	1.80	1.23		1.29				
78	Net present value	$20,319	$65,454	$29,496		$38,751				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons2 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Air Source Heat Pumps - (Resd)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x		x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$31,000	$10,777	$31,000		$31,000				
24	Utility Administration	$3,000	$648	$4,000		$5,000				
25	Evaluation Labor	$2,300	$786	$2,300		$2,300				
26	Advertising & Promotion	$1,500	$530	$1,500		$1,500				
27	Participant Incentives	$82,200	$55,140	$82,200		$82,200				
28	R&D	$0	$0	$0		$0				
29	Other	$1,000	$0	$1,000		$1,000				
30	**Total Costs**	$121,000	$67,881	$122,000	$0	$123,000	$0			
31	**Project Participants**									
32	Total Participants	137	98	137		137				
33	**% of Spending by Customer Segment**									
34	Residential	100%	100%	100%		100%				
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		31%							
42	Budget % (% of Row 30)		31%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	9,503	8,664	9,503		9,503				
58	Annual kWh Saved - Generator	1,301,886	849,067	1,301,886		1,301,886				
59	Cost per Annual kWh Saved	$0.0929	$0.0799	$0.0937		$0.0945				
60	Measure Lifetime (Years)	12	12	12		12				
61	Lifetime kWh savings	15,622,627	10,188,804	15,622,627		15,622,627				
62	Cost per kWh Lifetime	$0.0077	$0.0067	$0.0078		$0.0079				
63	Average kW Savings per Participant	0.133	0.133	0.133		0.133				
64	Annual kW Savings - Generator	18.230	13.041	18.230		18.230				
65	Cost per KW Saved	$6,637	$5,205	$6,692		$6,747				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	8.88	10.76	9.36		9.86				
69	Net present value	$953,563	$664,453	$1,020,453		$1,089,279				
70	**Rate Payer**									
71	B/C ratio	0.99	1.05	1.02		1.06				
72	Net present value	($8,551)	$36,979	$26,668		$65,944				
73	**Participant**									
74	B/C ratio	6.98	6.37	7.17		7.35				
75	Net present value	$1,228,641	$789,853	$1,268,704		$1,305,587				
76	**Societal**									
77	B/C ratio	6.02	6.27	6.36		6.69				
78	Net present value	$1,227,440	$842,485	$1,313,611		$1,400,575				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons3 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Geothermal Heat Pumps - (Resd)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$19,000	$26,806	$19,000		$19,000				
24	Utility Administration	$3,000	$1,611	$4,000		$5,000				
25	Evaluation Labor	$2,400	$1,954	$2,400		$2,400				
26	Advertising & Promotion	$1,500	$1,319	$1,500		$1,500				
27	Participant Incentives	$116,100	$121,800	$116,100		$116,100				
28	R&D	$0	$0	$0		$0				
29	Other	$1,000	$0	$1,000		$1,000				
30	**Total Costs**	$143,000	$153,490	$144,000	$0	$145,000	$0			
31	**Project Participants**									
32	Total Participants	43	41	43		43				
33	**% of Spending by Customer Segment**									
34	Residential	100%	100%	100%		100%				
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		31%							
42	Budget % (% of Row 30)		31%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	21,428	21,550	21,428		21,428				
58	Annual kWh Saved - Generator	921,413	883,557	921,413		921,413				
59	Cost per Annual kWh Saved	$0.1552	$0.1737	$0.1563		$0.1574				
60	Measure Lifetime (Years)	15	15	15		15				
61	Lifetime kWh savings	13,821,200	13,253,354	13,821,200		13,821,200				
62	Cost per kWh Lifetime	$0.0103	$0.0116	$0.0104		$0.0105				
63	Average kW Savings per Participant	0.517	0.518	0.517		0.517				
64	Annual kW Savings - Generator	22.220	21.257	22.220		22.220				
65	Cost per KW Saved	$6,436	$7,221	$6,481		$6,526				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	7.58	6.75	7.94		8.29				
69	Net present value	$940,944	$882,794	$998,851		$1,057,528				
70	**Rate Payer**									
71	B/C ratio	1.17	1.14	1.20		1.23				
72	Net present value	$155,770	$129,879	$190,218		$226,928				
73	**Participant**									
74	B/C ratio	1.49	1.51	1.53		1.56				
75	Net present value	$428,283	$425,882	$458,899		$487,286				
76	**Societal**									
77	B/C ratio	1.78	1.78	1.87		1.96				
78	Net present value	$703,608	$669,003	$782,467		$860,437				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons4 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Financing - (Resd)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other	x	x	x		x				
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$5,000	$469	$5,000		$5,000				
24	Utility Administration	$1,500	$1,246	$1,500		$1,500				
25	Evaluation Labor	$500	$216	$500		$500				
26	Advertising & Promotion	$2,000	$1,682	$2,000		$2,000				
27	Participant Incentives	$0	$216	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$4,000	$1,580	$4,000		$4,000				
30	**Total Costs**	$13,000	$5,408	$13,000	$0	$13,000	$0			
31	**Project Participants**									
32	Total Participants	7	0	7		7				
33	**% of Spending by Customer Segment**									
34	Residential	100%	100%	100%		100%				
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value	($13,000)	($5,408)	($13,000)		($13,000)				
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value	($13,000)	($5,408)	($13,000)		($13,000)				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$216	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	inf.	inf.		inf.				
78	Net present value	($13,000)	($5,192)	($13,000)		($13,000)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons5 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Advertising & Education (Resd)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education	x	x	x		x				
17	Classroom Training/Instructional	x	x	x		x				
18	R&D	x	x	x		x				
19	Renewable	x	x	x		x				
20	Other	x	x	x		x				
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$135,000	$29,947	$135,000		$135,000				
24	Utility Administration	$6,000	$6,263	$6,000		$6,000				
25	Evaluation Labor	$4,000	$192	$4,000		$4,000				
26	Advertising & Promotion	$0	$80,244	$0		$0				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D		$0							
29	Other	$5,000	$0	$5,000		$5,000				
30	**Total Costs**	$150,000	$116,647	$150,000	$0	$150,000	$0			
31	**Project Participants**									
32	Total Participants	10,000	49,807	10,000		10,000				
33	**% of Spending by Customer Segment**									
34	Residential	100%	100%	100%		100%				
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		31%							
42	Budget % (% of Row 30)		31%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances	x	x	x		x				
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)	x	x	x		x				
49	Manufacturing Process									
50	Refrigeration	x	x	x		x				
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value	($150,000)	($116,647)	($150,000)		($150,000)				
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value	($150,000)	($116,647)	($150,000)		($150,000)				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$0	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	inf.	inf.		inf.				
78	Net present value	($150,000)	($116,647)	($150,000)		($150,000)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons6 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company							ID 87	
3	**Project Name:**	Water Heater Store and Save (Resd)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	New								
11		**2014 Proposed**	**2014 Actual**	**2015 Proposed**	**2015 Actual**	**2016 Proposed**	**2016 Actual**			
12										
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$20,000	$2,257	$20,000		$20,000				
24	Utility Administration	$15,000	$1,432	$15,000		$15,000				
25	Evaluation Labor	$5,000	$506	$5,000		$5,000				
26	Advertising & Promotion	$0	$5,068	$0		$0				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$40,000	$9,264	$40,000	$0	$40,000	$0			
31	**Project Participants**									
32	Total Participants	8,622	14,026	8,622		8,622				
33	**% of Spending by Customer Segment**									
34	Residential	100%	93%	100%		100%				
35	Commercial		7%							
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		31%							
42	Budget % (% of Row 30)		31%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating	x	x	x		x				
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	25	25	25		25				
58	Annual kWh Saved - Generator	214,036	348,187	214,036		214,036				
59	Cost per Annual kWh Saved	$0.1869	$0.0266	$0.1869		$0.1869				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	214,036	348,187	214,036		214,036				
62	Cost per kWh Lifetime	$0.1869	$0.0266	$0.1869		$0.1869				
63	Average kW Savings per Participant	0.230	0.229	0.230		0.230				
64	Annual kW Savings - Generator	1,980.200	3,215.786	1,980.200		1,980.200				
65	Cost per KW Saved	$20	$3	$20		$20				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	8.87	62.19	9.78		9.34				
69	Net present value	$314,712	$566,798	$351,098		$333,574				
70	**Rate Payer**									
71	B/C ratio	6.29	16.02	6.83		6.43				
72	Net present value	$298,297	$540,094	$333,862		$315,476				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$17,189	$27,963	$18,049		$18,951				
76	**Societal**									
77	B/C ratio	8.87	62.19	9.78		9.34				
78	Net present value	$314,712	$566,798	$351,098		$333,574				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons7 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Air Conditioning Control (Resd)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$45,000	$27,765	$45,000		$45,000				
24	Utility Administration	$14,450	$10,826	$14,450		$14,450				
25	Evaluation Labor	$2,000	$643	$2,000		$2,000				
26	Advertising & Promotion	$17,050	$9,986	$18,050		$19,050				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$1,500	$0	$1,500		$1,500				
30	**Total Costs**	$80,000	$49,219	$81,000	$0	$82,000	$0			
31	**Project Participants**									
32	Total Participants	150	72	150		150				
33	**% of Spending by Customer Segment**									
34	Residential	100%	100%	100%		100%				
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		31%							
42	Budget % (% of Row 30)		31%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling	x	x	x	x	x	x			
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	48	48	48		48				
58	Annual kWh Saved - Generator	7,233	3,474	7,233		7,233				
59	Cost per Annual kWh Saved	$11.0598	$14.1678	$11.1980		$11.3363				
60	Measure Lifetime (Years)	15	15	15		15				
61	Lifetime kWh savings	108,501	52,110	108,501		108,501				
62	Cost per kWh Lifetime	$0.7373	$0.9445	$0.7465		$0.7558				
63	Average kW Savings per Participant	0.710	0.710	0.710		0.710				
64	Annual kW Savings - Generator	106.560	51.151	106.560		106.560				
65	Cost per KW Saved	$751	$962	$760		$770				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	3.50	2.73	3.66		3.82				
69	Net present value	$200,002	$85,183	$215,810		$230,959				
70	**Rate Payer**									
71	B/C ratio	3.25	2.58	3.40		3.53				
72	Net present value	$193,821	$82,214	$209,444		$224,420				
73	**Participant**									
74	B/C ratio	inf.,	inf.,	inf.,		inf.				
75	Net present value	$9,313	$4,473	$9,554		$9,777				
76	**Societal**									
77	B/C ratio	5.19	4.05	5.39		5.56				
78	Net present value	$335,378	$150,164	$355,214		$373,624				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons8 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Implementation & Training (Resd)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info	x	x	x		x				
16	Education	x	x	x		x				
17	Classroom Training/Instructional	x	x	x		x				
18	R&D	x	x	x		x				
19	Renewable	x	x	x		x				
20	Other	x	x	x		x				
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$12,400	$42,155	$12,400		$12,400				
24	Utility Administration	$1,200	$2,683	$1,200		$1,200				
25	Evaluation Labor	$1,200	$1,094	$1,200		$1,200				
26	Advertising & Promotion	$0	$2,214	$0		$0				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$25,200	$19	$25,200		$25,200				
30	**Total Costs**	$40,000	$48,166	$40,000	$0	$40,000	$0			
31	**Project Participants**									
32	Total Participants	175	74	175		175				
33	**% of Spending by Customer Segment**									
34	Residential	100%	100%	100%		100%				
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		31%							
42	Budget % (% of Row 30)		31%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances	x	x	x		x				
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)	x	x	x		x				
49	Manufacturing Process									
50	Refrigeration	x	x	x		x				
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value	($40,000)	($48,166)	($40,000)		($40,000)				
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value	($40,000)	($48,166)	($40,000)		($40,000)				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$0	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	inf.	inf.		inf.				
78	Net present value	($40,000)	($48,166)	($40,000)		($40,000)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons9 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Change a Light - Be Bright (Resd)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$122,775	$56,802	$126,775		$128,775				
24	Utility Administration	$22,000	$18,407	$22,000		$22,000				
25	Evaluation Labor	$6,000	$2,433	$6,000		$6,000				
26	Advertising & Promotion	$19,000	$9,713	$19,000		$19,000				
27	Participant Incentives	$176,225	$157,428	$182,225		$182,225				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$346,000	$244,783	$356,000	$0	$358,000	$0			
31	**Project Participants**									
32	Total Participants	96,000	111,329	99,000		99,000				
33	**% of Spending by Customer Segment**									
34	Residential	100%	100%	100%		100%				
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		31%							
42	Budget % (% of Row 30)		31%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	46	39	41		41				
58	Annual kWh Saved - Generator	4,377,992	4,389,009	4,033,665		4,033,665				
59	Cost per Annual kWh Saved	$0.0790	$0.0558	$0.0883		$0.0888				
60	Measure Lifetime (Years)	9	9	9		9				
61	Lifetime kWh savings	41,153,128	41,256,685	37,916,450		37,916,450				
62	Cost per kWh Lifetime	$0.0084	$0.0059	$0.0094		$0.0094				
63	Average kW Savings per Participant	0.005	0.005	0.005		0.005				
64	Annual kW Savings - Generator	519.050	514.969	478.220		478.220				
65	Cost per KW Saved	$667	$475	$744		$749				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	6.83	9.64	6.71		7.27				
69	Net present value	$2,017,543	$2,115,440	$2,034,002		$2,243,438				
70	**Rate Payer**									
71	B/C ratio	0.80	0.82	0.83		0.88				
72	Net present value	($603,035)	($511,732)	($472,957)		($349,380)				
73	**Participant**									
74	B/C ratio	25.16	15.59	23.15		23.84				
75	Net present value	$3,452,254	$3,354,929	$3,297,132		$3,400,943				
76	**Societal**									
77	B/C ratio	9.64	9.49	9.41		10.12				
78	Net present value	$2,702,573	$2,693,629	$2,712,959		$2,959,190				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons10 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Refrigeration (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$57,000	$88,444	$57,000		$57,000				
24	Utility Administration	$15,500	$8,226	$15,500		$15,500				
25	Evaluation Labor	$3,000	$606	$3,000		$3,000				
26	Advertising & Promotion	$9,705	$7,055	$9,705		$9,705				
27	Participant Incentives	$84,795	$84,756	$84,795		$84,795				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$26	$0		$0				
30	**Total Costs**	$170,000	$189,112	$170,000	$0	$170,000	$0			
31	**Project Participants**									
32	Total Participants	119	89	119		119				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	90%	90%	90%		90%				
36	Industrial	10%	10%	10%		10%				
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration	x	x	x		x				
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	10,403	13,943	10,403		10,403				
58	Annual kWh Saved - Generator	1,238,014	1,240,938	1,238,014		1,238,014				
59	Cost per Annual kWh Saved	$0.1373	$0.1524	$0.1373		$0.1373				
60	Measure Lifetime (Years)	7	7	7		7				
61	Lifetime kWh savings	9,136,543	9,158,123	9,136,543		9,136,543				
62	Cost per kWh Lifetime	$0.0186	$0.0206	$0.0186		$0.0186				
63	Average kW Savings per Participant	2.032	2.421	2.032		2.032				
64	Annual kW Savings - Generator	241.850	215.433	241.850		241.850				
65	Cost per KW Saved	$703	$878	$703		$703				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	3.94	3.43	4.27		4.63				
69	Net present value	$499,327	$459,949	$555,826		$616,802				
70	**Rate Payer**									
71	B/C ratio	1.14	1.06	1.20		1.27				
72	Net present value	$80,298	$34,685	$121,073		$167,168				
73	**Participant**									
74	B/C ratio	3.93	3.48	4.06		4.17				
75	Net present value	$390,467	$382,427	$406,933		$422,516				
76	**Societal**									
77	B/C ratio	3.95	3.33	4.26		4.59				
78	Net present value	$644,754	$586,373	$712,699		$783,856				

Measure life ranges from 2 to 10 years, consequently Lifetime KWh savings might be incorrect.

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons11 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Recommissioning (C&I)								
4	**Project Description:**	**Previously was included in the customized Grant program.**								
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	New								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$67,000	$13,847	$67,000		$67,000				
24	Utility Administration	$35,000	$5,171	$35,000		$35,000				
25	Evaluation Labor	$4,000	$60	$4,000		$4,000				
26	Advertising & Promotion	$10,000	$7,132	$10,000		$10,000				
27	Participant Incentives	$156,000	$0	$156,000		$156,000				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$272,000	$26,210	$272,000	$0	$272,000	$0			
31	**Project Participants**									
32	Total Participants	10	0	10		10				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	100%	100%	100%		100%				
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency	x	x	x		x				
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)	x	x	x		x				
49	Manufacturing Process									
50	Refrigeration	x	x	x		x				
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	193,752	0	193,752		193,752				
58	Annual kWh Saved - Generator	1,937,520	0	1,937,520		1,937,520				
59	Cost per Annual kWh Saved	$0.1404	$0.0000	$0.1404		$0.1404				
60	Measure Lifetime (Years)	6	0	6		6				
61	Lifetime kWh savings	11,760,746	0	11,760,746		11,760,746				
62	Cost per kWh Lifetime	$0.0231	$0.0000	$0.0231		$0.0231				
63	Average kW Savings per Participant	3.654	0.000	3.654		3.654				
64	Annual kW Savings - Generator	36.540	0.000	36.540		36.540				
65	Cost per KW Saved	$7,444	$0	$7,444		$7,444				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	1.72	inf.	1.94		2.15				
69	Net present value	$196,824	($26,210)	$254,628		$313,531				
70	**Rate Payer**									
71	B/C ratio	0.62	inf.	0.68		0.73				
72	Net present value	($285,118)	($26,210)	($249,900)		($213,057)				
73	**Participant**									
74	B/C ratio	1.86	inf.	1.92		1.99				
75	Net present value	$304,660	$0	$328,311		$351,412				
76	**Societal**									
77	B/C ratio	1.17	inf.	1.31		1.45				
78	Net present value	$78,865	($26,210)	$145,395		$211,373				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons12 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Grants (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$196,000	$112,286	$196,000		$196,000				
24	Utility Administration	$30,000	$10,134	$30,000		$30,000				
25	Evaluation Labor	$34,000	$14,855	$34,000		$34,000				
26	Advertising & Promotion	$8,800	$8,200	$8,800		$8,800				
27	Participant Incentives	$452,200	$194,920	$452,200		$452,200				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$721,000	$340,395	$721,000	$0	$721,000	$0			
31	**Project Participants**									
32	Total Participants	38	37	38		38				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	10%	10%	10%		10%				
36	Industrial	90%	90%	90%		90%				
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency	x	x	x		x				
45	Compressed Air	x	x	x		x				
46	Energy Star Appliances									
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)	x	x	x		x				
49	Manufacturing Process	x	x	x		x				
50	Refrigeration	x	x	x		x				
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	91,494	55,059	91,494		91,494				
58	Annual kWh Saved - Generator	3,476,772	2,037,200	3,476,772		3,476,772				
59	Cost per Annual kWh Saved	$0.2074	$0.1671	$0.2074		$0.2074				
60	Measure Lifetime (Years)	15	15	15		15				
61	Lifetime kWh savings	52,151,580	30,557,995	52,151,580		52,151,580				
62	Cost per kWh Lifetime	$0.0138	$0.0111	$0.0138		$0.0138				
63	Average kW Savings per Participant	26.910	12.606	26.910		26.910				
64	Annual kW Savings - Generator	1,022.580	466.409	1,022.580		1,022.580				
65	Cost per KW Saved	$705	$730	$705		$705				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	6.24	7.91	6.66		7.08				
69	Net present value	$3,781,500	$2,352,396	$4,083,312		$4,383,084				
70	**Rate Payer**									
71	B/C ratio	1.87	1.73	1.95		2.03				
72	Net present value	$2,090,647	$1,133,726	$2,341,944		$2,594,411				
73	**Participant**									
74	B/C ratio	1.06	1.34	1.09		1.11				
75	Net present value	$132,760	$376,182	$185,656		$235,191				
76	**Societal**									
77	B/C ratio	2.85	3.57	3.02		3.17				
78	Net present value	$4,367,509	$3,191,921	$4,753,598		$5,127,440				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons13 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Lighting (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$98,000	$155,235	$98,000		$98,000				
24	Utility Administration	$21,973	$11,302	$21,973		$21,973				
25	Evaluation Labor	$7,000	$3,034	$7,000		$7,000				
26	Advertising & Promotion	$6,000	$6,083	$6,000		$6,000				
27	Participant Incentives	$430,027	$1,076,527	$430,027		$430,027				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$563,000	$1,252,180	$563,000	$0	$563,000	$0			
31	**Project Participants**									
32	Total Participants	346	582	346		346				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	70%	70%	70%		70%				
36	Industrial	30%	30%	30%		30%				
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	9,827	13,902	9,827		9,827				
58	Annual kWh Saved - Generator	3,400,273	8,090,987	3,400,273		3,400,273				
59	Cost per Annual kWh Saved	$0.1656	$0.1548	$0.1656		$0.1656				
60	Measure Lifetime (Years)	11	11	11		11				
61	Lifetime kWh savings	38,967,132	92,722,713	38,967,132		38,967,132				
62	Cost per kWh Lifetime	$0.0144	$0.0135	$0.0144		$0.0144				
63	Average kW Savings per Participant	3.154	3.452	3.154		3.154				
64	Annual kW Savings - Generator	1,091.240	2,009.035	1,091.240		1,091.240				
65	Cost per KW Saved	$516	$623	$516		$516				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	6.35	7.12	6.85		7.35				
69	Net present value	$3,012,478	$7,664,934	$3,293,982		$3,573,609				
70	**Rate Payer**									
71	B/C ratio	1.51	1.48	1.59		1.66				
72	Net present value	$1,203,649	$2,883,378	$1,424,024		$1,645,331				
73	**Participant**									
74	B/C ratio	1.78	1.53	1.83		1.87				
75	Net present value	$1,016,665	$2,107,834	$1,080,676		$1,141,744				
76	**Societal**									
77	B/C ratio	3.48	3.13	3.72		3.95				
78	Net present value	$3,569,848	$8,850,300	$3,917,081		$4,253,096				

Measure life ranges from 5 to 12 years, consequently Lifetime KWh savings might be incorrect.

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons14 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Motors (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$36,000	$21,633	$36,000		$36,000				
24	Utility Administration	$8,000	$6,257	$8,000		$8,000				
25	Evaluation Labor	$2,000	$929	$2,000		$2,000				
26	Advertising & Promotion	$3,275	$3,984	$3,275		$3,275				
27	Participant Incentives	$31,725	$132,580	$31,725		$31,725				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$81,000	$165,384	$81,000	$0	$81,000	$0			
31	**Project Participants**									
32	Total Participants	71	161	71		71				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	30%	30%	30%		30%				
36	Industrial	70%	70%	70%		70%				
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)	x	x	x		x				
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	1,984	3,771	1,984		1,984				
58	Annual kWh Saved - Generator	140,895	607,146	140,895		140,895				
59	Cost per Annual kWh Saved	$0.5749	$0.2724	$0.5749		$0.5749				
60	Measure Lifetime (Years)	15	15	15		15				
61	Lifetime kWh savings	2,113,429	9,107,197	2,113,429		2,113,429				
62	Cost per kWh Lifetime	$0.0383	$0.0182	$0.0383		$0.0383				
63	Average kW Savings per Participant	0.319	0.963	0.319		0.319				
64	Annual kW Savings - Generator	22.650	155.090	22.650		22.650				
65	Cost per KW Saved	$3,576	$1,066	$3,576		$3,576				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	1.65	4.39	1.77		1.88				
69	Net present value	$52,790	$560,067	$62,111		$71,468				
70	**Rate Payer**									
71	B/C ratio	0.83	1.33	0.87		0.91				
72	Net present value	($28,260)	$178,996	($21,360)		($14,270)				
73	**Participant**									
74	B/C ratio	1.74	3.74	1.77		1.81				
75	Net present value	$49,408	$389,538	$51,944		$54,318				
76	**Societal**									
77	B/C ratio	1.72	6.20	1.82		1.93				
78	Net present value	$83,933	$909,531	$95,978		$107,777				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons15 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Compressed Air Audits (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info	x	x	x		x				
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$3,000	$5,085	$3,000		$3,000				
24	Utility Administration	$500	$0	$500		$500				
25	Evaluation Labor	$500	$0	$500		$500				
26	Advertising & Promotion	$1,000	$1,412	$1,000		$1,000				
27	Participant Incentives	$0	$16,006	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$15,000	$0	$15,000		$15,000				
30	**Total Costs**	$20,000	$22,503	$20,000	$0	$20,000	$0			
31	**Project Participants**									
32	Total Participants	4	3	4		4				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	10%	10%	10%		10%				
36	Industrial	90%	90%	90%		90%				
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air	x	x	x		x				
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value	($20,000)	($22,503)	($20,000)		($20,000)				
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value	($20,000)	($22,503)	($20,000)		($20,000)				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$1	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	inf.	inf.		inf.				
78	Net present value	($20,000)	($22,503)	($20,000)		($20,000)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons16 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Financing - (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other	x		x		x				
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$10,500	$469	$10,500		$10,500				
24	Utility Administration	$3,500	$1,246	$3,500		$3,500				
25	Evaluation Labor	$1,000	$216	$1,000		$1,000				
26	Advertising & Promotion	$8,000	$1,682	$8,000		$8,000				
27	Participant Incentives	$0	$216	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$9,000	$1,580	$9,000		$9,000				
30	**Total Costs**	$32,000	$5,408	$32,000	$0	$32,000	$0			
31	**Project Participants**									
32	Total Participants	5	0	5		5				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	90%	90%	90%		90%				
36	Industrial	10%	10%	10%		10%				
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency	x	x	x		x				
45	Compressed Air	x	x	x		x				
46	Energy Star Appliances									
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)	x	x	x		x				
49	Manufacturing Process	x	x	x		x				
50	Refrigeration	x	x	x		x				
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value	($32,000)	($5,408)	($32,000)		($32,000)				
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value	($32,000)	($5,408)	($32,000)		($32,000)				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$1	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	inf.	inf.		inf.				
78	Net present value	($32,000)	($5,408)	($32,000)		($32,000)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons17 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Air Source Heat Pumps - (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$13,000	$9,270	$13,000		$13,000				
24	Utility Administration	$3,000	$557	$4,000		$5,000				
25	Evaluation Labor	$2,340	$676	$2,340		$2,340				
26	Advertising & Promotion	$1,500	$456	$1,500		$1,500				
27	Participant Incentives	$47,160	$27,780	$47,160		$47,160				
28	R&D	$0	$0	$0		$0				
29	Other	$1,000	$0	$1,000		$1,000				
30	**Total Costs**	$68,000	$38,739	$69,000	$0	$70,000	$0			
31	**Project Participants**									
32	Total Participants	131	55	131		131				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	90%	90%	90%		90%				
36	Industrial	10%	10%	10%		10%				
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	5,316	7,452	5,316		5,316				
58	Annual kWh Saved - Generator	696,459	409,884	696,459		696,459				
59	Cost per Annual kWh Saved	$0.0976	$0.0945	$0.0991		$0.1005				
60	Measure Lifetime (Years)	12	12	12		12				
61	Lifetime kWh savings	8,357,506	4,918,608	8,357,506		8,357,506				
62	Cost per kWh Lifetime	$0.0081	$0.0079	$0.0083		$0.0084				
63	Average kW Savings per Participant	0.080	0.080	0.080		0.080				
64	Annual kW Savings - Generator	10.463	4.393	10.463		10.463				
65	Cost per KW Saved	$6,499	$8,818	$6,595		$6,690				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	10.57	9.19	11.03		11.48				
69	Net present value	$650,914	$317,438	$691,762		$733,816				
70	**Rate Payer**									
71	B/C ratio	1.21	1.07	1.24		1.27				
72	Net present value	$122,325	$23,548	$145,773		$171,593				
73	**Participant**									
74	B/C ratio	2.18	2.90	2.25		2.31				
75	Net present value	$325,566	$220,024	$343,786		$360,786				
76	**Societal**									
77	B/C ratio	3.32	3.86	3.49		3.66				
78	Net present value	$685,423	$361,178	$738,370		$791,925				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons18 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Geothermal Heat Pumps - (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$19,000	$38,970	$19,000		$21,000				
24	Utility Administration	$3,500	$2,342	$3,500		$3,500				
25	Evaluation Labor	$2,000	$2,841	$2,000		$2,000				
26	Advertising & Promotion	$2,000	$1,917	$2,000		$2,000				
27	Participant Incentives	$94,500	$16,800	$94,500		$94,500				
28	R&D	$0	$0	$0		$0				
29	Other	$1,000	$0	$1,000		$1,000				
30	**Total Costs**	$122,000	$62,871	$122,000	$0	$124,000	$0			
31	**Project Participants**									
32	Total Participants	35	4	35		35				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	90%	90%	90%		90%				
36	Industrial	10%	10%	10%		10%				
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	20,140	31,330	20,140		20,140				
58	Annual kWh Saved - Generator	704,911	125,318	704,911		704,911				
59	Cost per Annual kWh Saved	$0.1731	$0.5017	$0.1731		$0.1759				
60	Measure Lifetime (Years)	15	15	15		15				
61	Lifetime kWh savings	10,573,660	1,879,770	10,573,660		10,573,660				
62	Cost per kWh Lifetime	$0.0115	$0.0334	$0.0115		$0.0117				
63	Average kW Savings per Participant	0.517	0.517	0.517		0.517				
64	Annual kW Savings - Generator	18.084	2.067	18.084		18.084				
65	Cost per KW Saved	$6,746	$30,416	$6,746		$6,857				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	7.18	1.99	7.57		7.83				
69	Net present value	$753,768	$62,252	$801,216		$847,276				
70	**Rate Payer**									
71	B/C ratio	1.18	0.75	1.22		1.25				
72	Net present value	$136,696	($41,356)	$165,708		$194,504				
73	**Participant**									
74	B/C ratio	1.05	1.55	1.07		1.10				
75	Net present value	$31,911	$44,292	$51,215		$69,293				
76	**Societal**									
77	B/C ratio	1.76	1.46	1.84		1.93				
78	Net present value	$557,277	$58,548	$621,618		$683,229				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons19 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Implementation & Training (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info	x	x	x		x				
16	Education	x	x	x		x				
17	Classroom Training/Instructional	x	x	x		x				
18	R&D	x	x	x		x				
19	Renewable	x	x	x		x				
20	Other	x	x	x		x				
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$13,000	$48,444	$13,000		$13,000				
24	Utility Administration	$2,000	$3,084	$2,000		$2,000				
25	Evaluation Labor	$2,000	$1,258	$2,000		$2,000				
26	Advertising & Promotion	$2,000	$2,544	$2,000		$2,000				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$41,000	$22	$41,000		$41,000				
30	**Total Costs**	$60,000	$55,352	$60,000	$0	$60,000	$0			
31	**Project Participants**									
32	Total Participants	250	408	250		250				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	90%	90%	90%		90%				
36	Industrial	10%	10%	10%		10%				
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency	x	x	x		x				
45	Compressed Air	x	x	x		x				
46	Energy Star Appliances									
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)	x	x	x		x				
49	Manufacturing Process	x	x	x		x				
50	Refrigeration	x	x	x		x				
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value	($60,000)	($55,352)	($60,000)		($60,000)				
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value	($60,000)	($55,352)	($60,000)		($60,000)				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$0	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	inf.	inf.		inf.				
78	Net present value	($60,000)	($55,352)	($60,000)		($60,000)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons20 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Appliance Recycling (Resd)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$56,500	$48,536	$57,500		$58,500				
24	Utility Administration	$13,000	$8,431	$14,000		$15,000				
25	Evaluation Labor	$2,500	$360	$2,500		$2,500				
26	Advertising & Promotion	$15,750	$11,301	$15,750		$15,750				
27	Participant Incentives	$27,250	$22,450	$27,250		$27,250				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$115,000	$91,078	$117,000	$0	$119,000	$0			
31	**Project Participants**									
32	Total Participants	545	449	545		545				
33	**% of Spending by Customer Segment**									
34	Residential	100%	100%	100%		100%				
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		31%							
42	Budget % (% of Row 30)		31%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	1,054	1,060	1,054		1,054				
58	Annual kWh Saved - Generator	574,491	475,932	574,491		574,491				
59	Cost per Annual kWh Saved	$0.2002	$0.1914	$0.2037		$0.2071				
60	Measure Lifetime (Years)	8	8	8		8				
61	Lifetime kWh savings	4,595,927	3,807,456	4,595,927		4,595,927				
62	Cost per kWh Lifetime	$0.0250	$0.0239	$0.0255		$0.0259				
63	Average kW Savings per Participant	0.149	0.149	0.149		0.149				
64	Annual kW Savings - Generator	80.960	66.696	80.960		80.960				
65	Cost per KW Saved	$1,420	$1,366	$1,445		$1,470				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	2.57	2.68	2.78		3.00				
69	Net present value	$180,221	$152,924	$208,396		$237,809				
70	**Rate Payer**									
71	B/C ratio	0.69	0.70	0.74		0.78				
72	Net present value	($132,549)	($106,189)	($117,236)		($99,737)				
73	**Participant**									
74	B/C ratio	inf	inf	inf.		inf.				
75	Net present value	$424,843	$351,832	$440,536		$454,806				
76	**Societal**									
77	B/C ratio	4.17	4.41	4.48		4.78				
78	Net present value	$278,077	$233,729	$311,944		$346,597				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons21 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Industrial Focused Efficiency (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	New								
11		**2014 Proposed**	**2014 Actual**	**2015 Proposed**	**2015 Actual**	**2016 Proposed**	**2016 Actual**			
12										
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$30,500	$22,649	$48,000		$85,500				
24	Utility Administration	$16,500	$10,782	$19,000		$21,500				
25	Evaluation Labor	$2,000	$1,202	$2,000		$2,000				
26	Advertising & Promotion	$6,000	$1,478	$6,000		$6,000				
27	Participant Incentives	$30,000	$212,182	$60,000		$120,000				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$85,000	$248,292	$135,000	$0	$235,000	$0			
31	**Project Participants**									
32	Total Participants	1	1	2		4				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	0%	0%	0%		0%				
36	Industrial	100%	100%	100%		100%				
37	Farm									
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency	x	x	x		x				
45	Compressed Air	x	x	x		x				
46	Energy Star Appliances									
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)	x	x	x		x				
49	Manufacturing Process	x	x	x		x				
50	Refrigeration	x	x	x		x				
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	357,043	2,516,836	357,043		357,043				
58	Annual kWh Saved - Generator	357,043	2,516,836	714,086		1,428,172				
59	Cost per Annual kWh Saved	$0.2381	$0.0987	$0.1891		$0.1645				
60	Measure Lifetime (Years)	15	15	15		15				
61	Lifetime kWh savings	5,355,644	37,752,542	10,711,289		21,422,577				
62	Cost per kWh Lifetime	$0.0159	$0.0066	$0.0126		$0.0110				
63	Average kW Savings per Participant	54.280	660.668	54.285		54.283				
64	Annual kW Savings - Generator	54.280	660.668	108.570		217.130				
65	Cost per KW Saved	$1,566	$376	$1,243		$1,082				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	3.89	13.35	5.25		6.42				
69	Net present value	$245,994	$3,066,083	$573,269		$1,274,536				
70	**Rate Payer**									
71	B/C ratio	1.15	2.06	1.28		1.38				
72	Net present value	$42,324	$1,707,144	$153,759		$412,725				
73	**Participant**									
74	B/C ratio	2.18	2.56	1.12		0.57				
75	Net present value	$131,661	$996,307	$52,842		($763,336)				
76	**Societal**									
77	B/C ratio	2.98	7.82	2.02		1.17				
78	Net present value	$329,282	$4,603,125	$530,193		$319,893				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons22 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	House Therapy (LI)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$129,000	$10,087	$129,000		$129,000				
24	Utility Administration	$13,000	$12,274	$13,000		$13,000				
25	Evaluation Labor	$2,500	$1,955	$2,500		$2,500				
26	Advertising & Promotion	$3,000	$3,281	$3,000		$3,000				
27	Participant Incentives	$0	$114,943	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$2,500	$48	$2,500		$2,500				
30	**Total Costs**	$150,000	$142,588	$150,000	$0	$150,000	$0			
31	**Project Participants**									
32	Total Participants	160	100	160	0	160	0			
33	**% of Spending by Customer Segment**									
34	Residential	100%	100%	100%		100%				
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)	100%	100%	100%	100%	100%	100%			
42	Budget % (% of Row 30)	100%	100%	100%	100%	100%	100%			
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances	x	x	x		x				
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration	x	x	x		x				
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	1,560	2,049	1,527		1,527				
58	Annual kWh Saved - Generator	249,609	204,930	244,399		244,399				
59	Cost per Annual kWh Saved	$0.6009	$0.6958	$0.6138		$0.6138				
60	Measure Lifetime (Years)	10	10	10		10				
61	Lifetime kWh savings	2,456,150	2,016,512	2,404,885		2,404,885				
62	Cost per kWh Lifetime	$0.0611	$0.0707	$0.0624		$0.0624				
63	Average kW Savings per Participant	0.194	0.214	0.191		0.191				
64	Annual kW Savings - Generator	31.108	21.406	30.491		30.491				
65	Cost per KW Saved	$4,822	$6,661	$4,920		$4,920				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	1.02	0.86	1.09		1.17				
69	Net present value	$2,862	($19,557)	$12,789		$25,679				
70	**Rate Payer**									
71	B/C ratio	0.50	0.40	0.53		0.58				
72	Net present value	($152,115)	($153,659)	($144,528)		($136,800)				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$338,007	$300,507	$340,727		$347,060				
76	**Societal**									
77	B/C ratio	9.01	6.11	9.54		10.20				
78	Net present value	$184,407	$141,313	$196,476		$211,891				

Measure life ranges from 5 to 15 years, consequently Lifetime KWh savings might be incorrect.

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons23 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Advertising & Education (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info	x	x	x		x				
16	Education	x	x	x		x				
17	Classroom Training/Instructional	x	x	x		x				
18	R&D	x	x	x		x				
19	Renewable	x	x	x		x				
20	Other	x	x	x		x				
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$25,000	$30,683	$25,000		$25,000				
24	Utility Administration	$0	$0	$0		$0				
25	Evaluation Labor	$0	$0	$0		$0				
26	Advertising & Promotion	$0	$0	$0		$0				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$25,000	$30,683	$25,000	$0	$25,000	$0			
31	**Project Participants**									
32	Total Participants	10	39	10	0	10				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	100%	100%	100%		100%				
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency	x	x	x		x				
45	Compressed Air	x	x	x		x				
46	Energy Star Appliances									
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)	x	x	x		x				
49	Manufacturing Process	x	x	x		x				
50	Refrigeration	x	x	x		x				
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		1				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value	($25,000)	($30,683)	($25,000)		($25,000)				
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value	($25,000)	($30,683)	($25,000)		($25,000)				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$0	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	inf.	inf.		inf.				
78	Net present value	($25,000)	($30,683)	($25,000)		($25,000)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons24 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	CIP Development (R&D)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D	x	x	x		x				
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$0	$0	$0		$0				
24	Utility Administration	$0	$0	$0		$0				
25	Evaluation Labor	$0	$0	$0		$0				
26	Advertising & Promotion	$0	$0	$0		$0				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D	$150,000	$8,962	$150,000		$150,000				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$150,000	$8,962	$150,000	$0	$150,000	$0			
31	**Project Participants**									
32	Total Participants	0	0	0	0	0	0			
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other	100%	100%	100%		100%				
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency	x	x	x		x				
45	Compressed Air	x	x	x		x				
46	Energy Star Appliances	x	x	x		x				
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)	x	x	x		x				
49	Manufacturing Process	x	x	x		x				
50	Refrigeration	x	x	x		x				
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value	($150,000)	($8,962)	($150,000)		($150,000)				
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value	($150,000)	($8,962)	($150,000)		($150,000)				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$0	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	inf.	inf.		inf.				
78	Net present value	($150,000)	($8,962)	($150,000)		($150,000)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons25 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	NGEA Assessments (REG)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other	x	x	x		x				
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$0	$0	$0		$0				
24	Utility Administration	$0	$0	$0		$0				
25	Evaluation Labor	$0	$0	$0		$0				
26	Advertising & Promotion	$0	$0	$0		$0				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$95,000	$99,858	$95,000		$95,000				
30	**Total Costs**	$95,000	$99,858	$95,000	$0	$95,000	$0			
31	**Project Participants**									
32	Total Participants	0	0	0	0	0	0			
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other	100%	100%	100%		100%				
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value	($95,000)	($99,858)	($95,000)		($95,000)				
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value	($95,000)	($99,858)	($95,000)		($95,000)				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$0	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	inf.	inf.		inf.				
78	Net present value	($95,000)	($99,858)	($95,000)		($95,000)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons26 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company							ID 87	
3	**Project Name:**	CIP Planning - Other								
4	**Project Description:**	**Previously was included in Development.**								
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	New								
11		**2014 Proposed**	**2014 Actual**	**2015 Proposed**	**2015 Actual**	**2016 Proposed**	**2016 Actual**			
12										
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other	x	x	x		x				
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$0	$0	$0		$0				
24	Utility Administration	$0	$0	$0		$0				
25	Evaluation Labor	$0	$0	$0		$0				
26	Advertising & Promotion	$0	$0	$0		$0				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$300,000	$283,664	$300,000		$300,000				
30	**Total Costs**	$300,000	$283,664	$300,000	$0	$300,000	$0			
31	**Project Participants**									
32	Total Participants	0	0	0	0	0	0			
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other	100%	100%	100%		100%				
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency	x	x	x		x				
45	Compressed Air	x	x	x		x				
46	Energy Star Appliances	x	x	x		x				
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)	x	x	x		x				
49	Manufacturing Process	x	x	x		x				
50	Refrigeration	x	x	x		x				
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value	($300,000)	($283,664)	($300,000)		($300,000)				
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value	($300,000)	($283,664)	($300,000)		($300,000)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons27 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Adjustable Speed Drives (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x		x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$45,000	$29,138	$45,000		$45,000				
24	Utility Administration	$20,000	$7,517	$20,000		$20,000				
25	Evaluation Labor	$4,000	$106	$4,000		$4,000				
26	Advertising & Promotion	$5,600	$4,860	$5,600		$5,600				
27	Participant Incentives	$265,800	$394,218	$265,800		$265,800				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$340,400	$435,839	$340,400	$0	$340,400	$0			
31	**Project Participants**									
32	Total Participants	135	150	135	0	135				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	30%	30%	30%		30%				
36	Industrial	70%	70%	70%		70%				
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)	x	x	x		x				
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	28,226	37,650	28,226		28,226				
58	Annual kWh Saved - Generator	3,810,456	5,647,505	3,810,456		3,810,456				
59	Cost per Annual kWh Saved	$0.0893	$0.0772	$0.0893		$0.0893				
60	Measure Lifetime (Years)	15	15	15		15				
61	Lifetime kWh savings	57,156,840	84,712,575	57,156,840		57,156,840				
62	Cost per kWh Lifetime	$0.0060	$0.0051	$0.0060		$0.0060				
63	Average kW Savings per Participant	3.735	5.996	3.735		3.735				
64	Annual kW Savings - Generator	504.200	899.453	504.200		504.200				
65	Cost per KW Saved	$675	$485	$675		$675				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	9.81	12.26	10.50		11.19				
69	Net present value	$2,997,510	$4,905,411	$3,232,843		$3,469,813				
70	**Rate Payer**									
71	B/C ratio	1.30	1.43	1.36		1.41				
72	Net present value	$771,603	$1,599,157	$940,436		$1,115,131				
73	**Participant**									
74	B/C ratio	3.44	4.42	3.53		3.62				
75	Net present value	$1,841,686	$2,987,828	$1,911,321		$1,976,531				
76	**Societal**									
77	B/C ratio	6.03	8.76	6.40		6.76				
78	Net present value	$4,174,216	$7,087,502	$4,479,197		$4,779,018				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons28 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Lighting, New Construction (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$17,250	$11,914	$17,250		$17,250				
24	Utility Administration	$19,000	$4,006	$19,000		$19,000				
25	Evaluation Labor	$2,000	$659	$2,000		$2,000				
26	Advertising & Promotion	$7,000	$6,920	$7,000		$7,000				
27	Participant Incentives	$97,750	$102,199	$97,750		$97,750				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$143,000	$125,698	$143,000	$0	$143,000	$0			
31	**Project Participants**									
32	Total Participants	202	128	202	0	202				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	70%	70%	70%		70%				
36	Industrial	30%	30%	30%		30%				
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	10,715	16,956	10,715		10,715				
58	Annual kWh Saved - Generator	2,164,338	2,170,324	2,164,338		2,164,338				
59	Cost per Annual kWh Saved	$0.0661	$0.0579	$0.0661		$0.0661				
60	Measure Lifetime (Years)	12	12	12		12				
61	Lifetime kWh savings	25,127,961	25,197,462	25,127,961		25,127,961				
62	Cost per kWh Lifetime	$0.0057	$0.0050	$0.0057		$0.0057				
63	Average kW Savings per Participant	1.829	3.868	1.829		1.829				
64	Annual kW Savings - Generator	369.522	495.137	369.522		369.522				
65	Cost per KW Saved	$387	$254	$387		$387				
66	**Cost/Benefit Results**						Measure life ranges from 10 to 12 years, consequently Lifetime KWh savings might be incorrect.			
67	**Utility**									
68	B/C ratio	12.08	17.51	13.03		13.99				
69	Net present value	$1,584,274	$2,074,918	$1,720,320		$1,857,088				
70	**Rate Payer**									
71	B/C ratio	1.42	1.62	1.48		1.55				
72	Net present value	$506,878	$844,088	$606,925		$710,122				
73	**Participant**									
74	B/C ratio	1.93	0.99	1.99		2.04				
75	Net present value	$590,131	($15,030)	$627,828		$662,981				
76	**Societal**									
77	B/C ratio	3.50	2.21	3.75		4.00				
78	Net present value	$1,705,096	$1,729,739	$1,874,035		$2,039,776				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons29 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Energy Feedback Program (Resd)								
4	**Project Description:**	**This program includes: Bill Analyzer, Opower, and Rothsay-Town measures.**								
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$335,600	$303,906	$335,600		$335,600				
24	Utility Administration	$8,000	$1,367	$8,000		$8,000				
25	Evaluation Labor	$22,000	$6,030	$22,000		$22,000				
26	Advertising & Promotion	$5,000	$11,940	$5,000		$5,000				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$370,600	$323,243	$370,600	$0	$370,600	$0			
31	**Project Participants**									
32	Total Participants	32,810	34,254	32,810	0	32,810				
33	**% of Spending by Customer Segment**									
34	Residential	100%	100%	100%		100%				
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		31%							
42	Budget % (% of Row 30)		31%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances	x	x	x		x				
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration	x	x	x		x				
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	64	74	64		64				
58	Annual kWh Saved - Generator	2,085,661	2,532,552	2,085,661		2,085,661				
59	Cost per Annual kWh Saved	$0.1777	$0.1276	$0.1777		$0.1777				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	2,085,661	2,532,552	2,085,661		2,085,661				
62	Cost per kWh Lifetime	$0.1777	$0.1276	$0.1777		$0.1777				
63	Average kW Savings per Participant	0.036	0.041	0.036		0.036				
64	Annual kW Savings - Generator	1,169.430	1,419.996	1,169.430		1,169.430				
65	Cost per KW Saved	$317	$228	$317		$317				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	1.10	1.53	1.20		1.23				
69	Net present value	$35,674	$170,083	$75,288		$84,609				
70	**Rate Payer**									
71	B/C ratio	0.48	0.54	0.51		0.51				
72	Net present value	($444,207)	($412,622)	($428,588)		($444,460)				
73	**Participant**									
74	B/C ratio	inf	inf	inf.		inf.				
75	Net present value	$502,503	$610,173	$527,628		$554,009				
76	**Societal**									
77	B/C ratio	1.10	1.53	1.20		1.23				
78	Net present value	$35,674	$170,083	$75,288		$84,609				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons30 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	PUC Assessments (REG)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other	x	x	x		x				
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$0	$0	$0		$0				
24	Utility Administration	$0	$0	$0		$0				
25	Evaluation Labor	$0	$0	$0		$0				
26	Advertising & Promotion	$0	$0	$0		$0				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$20,000	$17,020	$20,000		$20,000				
30	**Total Costs**	$20,000	$17,020	$20,000	$0	$20,000	$0			
31	**Project Participants**									
32	Total Participants	0	0	0	0	0	0			
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other	100%	100%	100%		100%				
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value	($20,000)	($17,020)	($20,000)		($20,000)				
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value	($20,000)	($17,020)	($20,000)		($20,000)				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$0	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	inf.	inf.		inf.				
78	Net present value	($20,000)	($17,020)	($20,000)		($20,000)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons31 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Home Transformer Pilot (Resd)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	New								
11		**2014 Proposed**	**2014 Actual**	**2015 Proposed**	**2015 Actual**	**2016 Proposed**	**2016 Actual**			
12										
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$16,000	$23,208	$16,500		$17,000				
24	Utility Administration	$3,305	$16,460	$3,805		$4,305				
25	Evaluation Labor	$2,000	$178	$2,000		$2,000				
26	Advertising & Promotion	$6,000	$5,499	$6,000		$6,000				
27	Participant Incentives	$32,695	$6,857	$32,695		$32,695				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$15	$0		$0				
30	**Total Costs**	$60,000	$52,218	$61,000	$0	$62,000	$0			
31	**Project Participants**									
32	Total Participants	1,575	240	1,575	0	1,575	0			
33	**% of Spending by Customer Segment**									
34	Residential	100%	100%	100%		100%				
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		31%							
42	Budget % (% of Row 30)		31%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances	x	x	x		x				
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration	x	x	x		x				
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	132	369	129		129				
58	Annual kWh Saved - Generator	207,727	88,634	203,386		203,386				
59	Cost per Annual kWh Saved	$0.2888	$0.5891	$0.2999		$0.3048				
60	Measure Lifetime (Years)	11	11	11		11				
61	Lifetime kWh savings	2,282,925	974,090	2,235,211		2,235,211				
62	Cost per kWh Lifetime	$0.0263	$0.0536	$0.0273		$0.0277				
63	Average kW Savings per Participant	0.009	0.020	0.009		0.009				
64	Annual kW Savings - Generator	14.809	4.895	14.294		14.294				
65	Cost per KW Saved	$4,052	$10,668	$4,267		$4,337				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	1.84	0.93	1.92		2.04				
69	Net present value	$50,312	($3,470)	$56,266		$64,780				
70	**Rate Payer**									
71	B/C ratio	0.55	0.42	0.58		0.61				
72	Net present value	($89,699)	($67,336)	($85,824)		($81,709)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons32 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company							ID 87	
3	**Project Name:**	School Kit Pilot (Resd)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	New								
11		**2014 Proposed**	**2014 Actual**	**2015 Proposed**	**2015 Actual**	**2016 Proposed**	**2016 Actual**			
12										
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x		x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$3,000	$3,004	$3,500		$4,000				
24	Utility Administration	$4,225	$3,548	$4,725		$5,225				
25	Evaluation Labor	$2,000	$0	$2,000		$2,000				
26	Advertising & Promotion	$5,000	$0	$5,000		$5,000				
27	Participant Incentives	$8,775	$18,907	$8,775		$8,775				
28	R&D	$0	$0	$0		$0				
29	Other	$1,000	$0	$1,000		$1,000				
30	**Total Costs**	$24,000	$25,460	$25,000	$0	$26,000	$0			
31	**Project Participants**									
32	Total Participants	1,275	1,252	1,275	0	1,275	0			
33	**% of Spending by Customer Segment**									
34	Residential	100%	100%	100%		100%				
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		31%							
42	Budget % (% of Row 30)		31%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances	x	x	x		x				
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration	x	x	x		x				
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	100	270	95		95				
58	Annual kWh Saved - Generator	126,900	337,657	121,629		121,629				
59	Cost per Annual kWh Saved	$0.1891	$0.0754	$0.2055		$0.2138				
60	Measure Lifetime (Years)	8	8	8		8				
61	Lifetime kWh savings	1,045,659	2,782,295	1,002,226		1,002,226				
62	Cost per kWh Lifetime	$0.0230	$0.0092	$0.0249		$0.0259				
63	Average kW Savings per Participant	0.008	0.020	0.008		0.008				
64	Annual kW Savings - Generator	10.222	24.579	9.603		9.603				
65	Cost per KW Saved	$2,348	$1,036	$2,603		$2,708				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	2.34	5.71	2.34		2.46				
69	Net present value	$32,224	$119,862	$33,603		$37,872				
70	**Rate Payer**									
71	B/C ratio	0.61	0.70	0.63		0.66				
72	Net present value	($36,087)	($62,392)	($34,094)		($32,334)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons33 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	ECM (Resd)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	New								
11		**2014 Proposed**	**2014 Actual**	**2015 Proposed**	**2015 Actual**	**2016 Proposed**	**2016 Actual**			
12										
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$8,000	$1,060	$8,500		$9,000				
24	Utility Administration	$5,000	$3,596	$5,500		$6,000				
25	Evaluation Labor	$2,000	$362	$2,000		$2,000				
26	Advertising & Promotion	$8,000	$74	$8,000		$8,000				
27	Participant Incentives	$12,000	$4,000	$12,000		$12,000				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$35,000	$9,091	$36,000	$0	$37,000	$0			
31	**Project Participants**									
32	Total Participants	120	40	120		120				
33	**% of Spending by Customer Segment**									
34	Residential	100%	100%	100%		100%				
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		31%							
42	Budget % (% of Row 30)		31%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)	x	x	x		x				
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	775	783	775		775				
58	Annual kWh Saved - Generator	93,001	31,328	93,001		93,001				
59	Cost per Annual kWh Saved	$0.3763	$0.2902	$0.3871		$0.3978				
60	Measure Lifetime (Years)	20	20	20		20				
61	Lifetime kWh savings	1,860,019	626,551	1,860,019		1,860,019				
62	Cost per kWh Lifetime	$0.0188	$0.0145	$0.0194		$0.0199				
63	Average kW Savings per Participant	0.071	0.071	0.071		0.071				
64	Annual kW Savings - Generator	8.490	2.829	8.490		8.490				
65	Cost per KW Saved	$4,122	$3,214	$4,240		$4,358				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	2.50	3.24	2.59		2.67				
69	Net present value	$52,626	$20,334	$57,150		$61,751				
70	**Rate Payer**									
71	B/C ratio	0.69	0.73	0.71		0.74				
72	Net present value	($39,820)	($10,807)	($37,795)		($35,546)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons34 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Commercial Design Assistance (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$138,927	$169,821	$138,927		$138,927				
24	Utility Administration	$20,000	$6,643	$20,000		$20,000				
25	Evaluation Labor	$5,000	$496	$5,000		$5,000				
26	Advertising & Promotion	$11,585	$8,091	$11,585		$11,585				
27	Participant Incentives	$314,988	$29,400	$314,988		$314,988				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$490,500	$214,451	$490,500	$0	$490,500	$0			
31	**Project Participants**									
32	Total Participants	6	2	6	0	6				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	100%	100%	100%		100%				
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency	x	x	x		x				
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting	x	x	x		x				
48	Motors (including ASD, Fans, Pumps)	x	x	x		x				
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling	x	x	x		x				
52	Space Heating	x	x	x		x				
53	Water Heating	x	x	x		x				
54	Weatherization	x	x	x		x				
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	403,196	180,937	403,196		403,196				
58	Annual kWh Saved - Generator	2,419,175	361,875	2,419,175		2,419,175				
59	Cost per Annual kWh Saved	$0.2028	$0.5926	$0.2028		$0.2028				
60	Measure Lifetime (Years)	20	20	20		20				
61	Lifetime kWh savings	48,383,491	7,237,498	48,383,491		48,383,491				
62	Cost per kWh Lifetime	$0.0101	$0.0296	$0.0101		$0.0101				
63	Average kW Savings per Participant	84.868	51.151	84.868		84.868				
64	Annual kW Savings - Generator	509.210	102.302	509.210		509.210				
65	Cost per KW Saved	$963	$2,096	$963		$963				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	6.43	2.58	6.82		7.20				
69	Net present value	$2,665,160	$337,856	$2,852,867		$3,040,695				
70	**Rate Payer**									
71	B/C ratio	1.44	1.14	1.49		1.55				
72	Net present value	$964,812	$66,652	$1,106,533		$1,251,119				
73	**Participant**									
74	B/C ratio	2.16	0.97	2.21		2.25				
75	Net present value	$1,124,684	($10,213)	$1,172,838		$1,218,119				
76	**Societal**									
77	B/C ratio	4.64	1.82	4.86		5.08				
78	Net present value	$4,170,798	$419,582	$4,424,037		$4,672,167				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons35 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Air Conditioning Control (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	Existing								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$17,500	$4,631	$17,500		$17,500				
24	Utility Administration	$6,350	$3,820	$6,350		$6,350				
25	Evaluation Labor	$2,000	$0	$2,000		$2,000				
26	Advertising & Promotion	$5,510	$0	$5,860		$6,210				
27	Participant Incentives	$2,640	$1,618	$4,290		$5,940				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$34,000	$10,068	$36,000	$0	$38,000	$0			
31	**Project Participants**									
32	Total Participants	40	39	65	0	90				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	100%	100%	100%		100%				
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling	x	x	x		x				
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other									
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	31	54	19		14				
58	Annual kWh Saved - Generator	1,222	2,110	1,222		1,222				
59	Cost per Annual kWh Saved	$27.8298	$4.7712	$29.4669		$31.1039				
60	Measure Lifetime (Years)	15	15	15		15				
61	Lifetime kWh savings	18,326	31,654	18,326		18,326				
62	Cost per kWh Lifetime	$1.8553	$0.3181	$1.9645		$2.0736				
63	Average kW Savings per Participant	1.369	2.425	0.842		0.608				
64	Annual kW Savings - Generator	54.760	94.589	54.760		54.760				
65	Cost per KW Saved	$621	$106	$657		$694				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	4.19	24.45	4.20		4.19				
69	Net present value	$108,524	$236,111	$115,056		$121,246				
70	**Rate Payer**									
71	B/C ratio	4.08	21.16	4.09		4.09				
72	Net present value	$107,616	$234,543	$114,121		$120,285				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$3,591	$3,260	$5,269		$6,946				
76	**Societal**									
77	B/C ratio	6.74	43.21	7.00		7.23				
78	Net present value	$180,037	$356,691	$190,254		$199,738				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons36 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	PC Power Supply (C&I)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	New								
11		**2014 Proposed**	**2014 Actual**	**2015 Proposed**	**2015 Actual**	**2016 Proposed**	**2016 Actual**			
12										
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other									
21	**Direct (kWh or kW Savings)**	x	x	x		x				
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$19,783	$4,554	$19,783		$19,783				
24	Utility Administration	$8,500	$3,218	$8,500		$8,500				
25	Evaluation Labor	$2,000	$0	$2,000		$2,000				
26	Advertising & Promotion	$2,500	$1,150	$2,500		$2,500				
27	Participant Incentives	$34,217	$7,346	$34,217		$34,217				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$67,000	$16,268	$67,000	$0	$67,000	$0			
31	**Project Participants**									
32	Total Participants	3,562	1,148	3,562	0	3,562				
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial	90%	90%	90%		90%				
36	Industrial	10%	10%	10%		10%				
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances	x	x	x		x				
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	223	161	223		223				
58	Annual kWh Saved - Generator	793,399	184,989	793,399		793,399				
59	Cost per Annual kWh Saved	$0.0844	$0.0879	$0.0844		$0.0844				
60	Measure Lifetime (Years)	4	4	4		4				
61	Lifetime kWh savings	3,173,597	739,956	3,173,597		3,173,597				
62	Cost per kWh Lifetime	$0.0211	$0.0220	$0.0211		$0.0211				
63	Average kW Savings per Participant	0.052	0.038	0.052		0.052				
64	Annual kW Savings - Generator	184.960	43.131	184.960		184.960				
65	Cost per KW Saved	$362	$377	$362		$362				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	3.47	3.33	4.08		4.69				
69	Net present value	$165,614	$37,971	$206,208		$247,505				
70	**Rate Payer**									
71	B/C ratio	0.99	0.98	1.12		1.25				
72	Net present value	($2,548)	($994)	$29,638		$62,107				
73	**Participant**									
74	B/C ratio	5.35	4.17	5.57		5.81				
75	Net present value	$172,054	$36,588	$180,924		$190,238				
76	**Societal**									
77	B/C ratio	3.51	2.89	4.15		4.77				
78	Net present value	$181,472	$38,701	$227,558		$273,042				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons30 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Made in Minnesota Solar Energy Assessments (REG)								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	New								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other	x	x	x		x				
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$0	$0	$0		$0				
24	Utility Administration	$0	$0	$0		$0				
25	Evaluation Labor	$0	$0	$0		$0				
26	Advertising & Promotion	$0	$0	$0		$0				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$103,909	$103,909	$103,909		$103,909				
30	**Total Costs**	$103,909	$103,909	$103,909	$0	$103,909	$0			
31	**Project Participants**									
32	Total Participants	0	0	0	0	0	0			
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other	100%	100%	100%		100%				
39	**Total % of Spending (must equal 100%)**	100%	100%	100%	0%	100%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value	($103,909)	($103,909)	($103,909)		($103,909)				
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value	($103,909)	($103,909)	($103,909)		($103,909)				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$0	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	inf.	inf.		inf.				
78	Net present value	($103,909)	($103,909)	($103,909)		($103,909)				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons38 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company							ID 87	
3	**Project Name:**	Inactive project costs - Town Energy Challenge								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	New								
11		**2014 Proposed**	**2014 Actual**	**2015 Proposed**	**2015 Actual**	**2016 Proposed**	**2016 Actual**			
12										
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other	x	x	x	x	x	x			
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$0	$9,750	$0		$0				
24	Utility Administration	$0	$0	$0		$0				
25	Evaluation Labor	$0	$0	$0		$0				
26	Advertising & Promotion	$0	$0	$0		$0				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$1,100	$0		$0				
30	**Total Costs**	$0	$10,850	$0	$0	$0	$0			
31	**Project Participants**									
32	Total Participants	0	273	0	0	0	0			
33	**% of Spending by Customer Segment**									
34	Residential		79%							
35	Commercial		21%							
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	0%	100%	0%	0%	0%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		31%							
42	Budget % (% of Row 30)		31%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	307	0		0				
58	Annual kWh Saved - Generator	0	83,714	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.1296	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	83,714	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.1296	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.217	0.000		0.000				
64	Annual kW Savings - Generator	0.000	59.219	0.000		0.000				
65	Cost per KW Saved	$0	$183	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	1.72	inf.		inf.				
69	Net present value	$0	$7,813	$0		$0				
70	**Rate Payer**									
71	B/C ratio	inf.	0.63	inf.		inf.				
72	Net present value	$0	($11,152)	$0		$0				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$19,859	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	1.72	inf.		inf.				
78	Net present value	$0	$7,813	$0		$0				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons39 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company							ID 87	
3	**Project Name:**	Miscellaneous project costs - Company CIP Projects								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	New								
11		**2014 Proposed**	**2014 Actual**	**2015 Proposed**	**2015 Actual**	**2016 Proposed**	**2016 Actual**			
12										
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other	x	x	x	x	x	x			
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$0	$31,255	$0		$0				
24	Utility Administration	$0	$7,253	$0		$0				
25	Evaluation Labor	$0	$1,056	$0		$0				
26	Advertising & Promotion	$0	$0	$0		$0				
27	Participant Incentives	$0	$710	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$0	$40,274	$0	$0	$0	$0			
31	**Project Participants**									
32	Total Participants	0	0	0	0	0	0			
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	0%	0%	0%	0%	0%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value	$0	($40,274)	$0		$0				
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value	$0	($40,274)	$0		$0				
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$0	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	inf.	inf.		inf.				
78	Net present value	$0	($40,274)	$0		$0				

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons40 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Inactive project costs - Business Education								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	New								
11		**2014 Proposed**	**2014 Actual**	**2015 Proposed**	**2015 Actual**	**2016 Proposed**	**2016 Actual**			
12										
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other	x	x	x	x	x	x			
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$0	$12	$0		$0				
24	Utility Administration	$0	$564	$0		$0				
25	Evaluation Labor	$0	$420	$0		$0				
26	Advertising & Promotion	$0	$0	$0		$0				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$0	$996	$0	$0	$0	$0			
31	**Project Participants**									
32	Total Participants	0	0	0	0	0	0			
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial		90%							
36	Industrial		10%							
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	0%	100%	0%	0%	0%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other	x	x	x	x	x	x			
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value		($996)							
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value		($996)							
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$0	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	inf.	inf.		inf.				
78	Net present value		($996)							

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons41 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Inactive project costs - Residential Demand Control								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	New								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other	x	x	x	x	x	x			
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$0	$1,309	$0		$0				
24	Utility Administration	$0	$78	$0		$0				
25	Evaluation Labor	$0	$120	$0		$0				
26	Advertising & Promotion	$0	$70	$0		$0				
27	Participant Incentives	$0	$300	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$0	$0		$0				
30	**Total Costs**	$0	$1,877	$0	$0	$0	$0			
31	**Project Participants**									
32	Total Participants	0	1	0	0	0	0			
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	0%	0%	0%	0%	0%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	599	0		0				
58	Annual kWh Saved - Generator	0	599	0		0				
59	Cost per Annual kWh Saved	$0.0000	$3.1350	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	599	0		0				
62	Cost per kWh Lifetime	$0.0000	$3.1350	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.782	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.782	0.000		0.000				
65	Cost per KW Saved	$0	$2,400	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	5.55	inf.		inf.				
69	Net present value	$0	$8,545							
70	**Rate Payer**		4.41							
71	B/C ratio	inf.	4.41	inf.		inf.				
72	Net present value	$0	$8,057							
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$1,035	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	9.62	inf.		inf.				
78	Net present value	$0	$13,596							

	A	B	C	D	E	F	G	H	I	J
1	**Electric Conservation Project Information Sheet**				2014 Cons42 BudgtSavgs					
2	**Utility Name:**	Otter Tail Power Company								ID 87
3	**Project Name:**	Miscellaneous project costs - Accounting Adjustments								
4	**Project Description:**									
5	(Note changes)									
6										
7										
8										
9	**Type**	Conservation								
10	**Status:**	New								
11		**2014**	**2014**	**2015**	**2015**	**2016**	**2016**			
12		**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**			
13	**Project Type -- Enter "X"**									
14	**Indirect (No kWh or kW Savings)**									
15	Audit/Info									
16	Education									
17	Classroom Training/Instructional									
18	R&D									
19	Renewable									
20	Other	x	x	x	x	x	x			
21	**Direct (kWh or kW Savings)**									
22	**Cost Components -- Enter Dollars**									
23	Project Delivery	$0	$0	$0		$0				
24	Utility Administration	$0	$0	$0		$0				
25	Evaluation Labor	$0	$0	$0		$0				
26	Advertising & Promotion	$0	$0	$0		$0				
27	Participant Incentives	$0	$0	$0		$0				
28	R&D	$0	$0	$0		$0				
29	Other	$0	$13,052	$0		$0				
30	**Total Costs**	$0	$13,052	$0	$0	$0	$0			
31	**Project Participants**									
32	Total Participants	0	0	0	0	0	0			
33	**% of Spending by Customer Segment**									
34	Residential									
35	Commercial									
36	Industrial									
37	Farm	farm customers may be included in residential or commercial								
38	Other									
39	**Total % of Spending (must equal 100%)**	0%	0%	0%	0%	0%	0%			
40	**Low-Income & Renter Participation**									
41	Participants % (% of Row 32)		0%							
42	Budget % (% of Row 30)		0%							
43	**End-Use Target -- Enter "X" or %**									
44	Building Efficiency									
45	Compressed Air									
46	Energy Star Appliances									
47	Lighting									
48	Motors (including ASD, Fans, Pumps)									
49	Manufacturing Process									
50	Refrigeration									
51	Space Cooling									
52	Space Heating									
53	Water Heating									
54	Weatherization									
55	General/Other	x	x	x		x				
56	**Energy and Demand Savings - Generator**									
57	Average Annual kWh Savings per Participant	0	0	0		0				
58	Annual kWh Saved - Generator	0	0	0		0				
59	Cost per Annual kWh Saved	$0.0000	$0.0000	$0.0000		$0.0000				
60	Measure Lifetime (Years)	1	1	1		1				
61	Lifetime kWh savings	0	0	0		0				
62	Cost per kWh Lifetime	$0.0000	$0.0000	$0.0000		$0.0000				
63	Average kW Savings per Participant	0.000	0.000	0.000		0.000				
64	Annual kW Savings - Generator	0.000	0.000	0.000		0.000				
65	Cost per KW Saved	$0	$0	$0		$0				
66	**Cost/Benefit Results**									
67	**Utility**									
68	B/C ratio	inf.	inf.	inf.		inf.				
69	Net present value	$0	($13,052)							
70	**Rate Payer**									
71	B/C ratio	inf.	inf.	inf.		inf.				
72	Net present value	$0	($13,052)							
73	**Participant**									
74	B/C ratio	inf.	inf.	inf.		inf.				
75	Net present value	$0	$0	$0		$0				
76	**Societal**									
77	B/C ratio	inf.	inf.	inf.		inf.				
78	Net present value	$0	($13,052)							

CERTIFICATE OF SERVICE

RE: In the Matter of Otter Tail Power Company's 2014 Demand Side Management Financial Incentive Project, Annual Filing to Update the Conservation Improvement Project Rider, and 2014 CIP Status Report
Docket Nos. E017/M-15-279, E017/CIP-13-277.01

I, Jana Emery, hereby certify that I have this day served a copy of the following, or a summary thereof, on Daniel P. Wolf 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**, **2015**

/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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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Leo	Steidel	lsteidel@energyplatforms.com	Energy Platforms	8170 Old Carriage Court N Ste 200 Shakopee, MN 55379	Paper Service	No	OFF_SL_13-277_CIP-13-277
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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