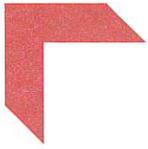


# Universal System Benefits Activities 2016 Annual Report

March 2017

NorthWestern<sup>®</sup>  
Energy

 **Efficiency  
Plus**



March 1, 2017

Mr. Mark Schoenfeld  
Montana Department of Revenue  
PO Box 5805  
Helena MT 59620-5805

Dear Mr. Schoenfeld:

Enclosed with this letter is the 2016 Electric Universal System Benefits (USB) report for NorthWestern Energy. Copies of this report are also being provided to the Montana Public Service Commission and members of the Energy and Telecommunications Interim Committee of the Montana Legislature.

The report documents the revenues collected by NorthWestern Energy through the USB Charge; summarizes the qualifying expenditures made by the utility in the implementation of internal programs and activities, and the credits claimed; and documents the collection and reimbursement of the USB charge from NorthWestern Energy's Large Customers.

A total of \$9,447,558 in electric USB revenues was collected from NorthWestern Energy's electric distribution customers in 2016.

As required by statute and Montana Public Service Commission Order No. 7458, 50% of the 2016 USB funds, or \$4,765,520 was directed to Low Income activities by NorthWestern Energy. Large Customers funds accounted for 31% of the total 2016 electric USB revenues, or \$2,893,024 with \$67,000 self-directed to Low Income activities and \$2,822,203 self-directed to energy reduction activities. Allocations by NorthWestern Energy to the other public purpose categories are as follows: \$717,796 to Local Conservation, \$266,924 to Market Transformation, and \$846,035 to Renewable Resources and Research and Development.

Included with the 2016 report are updates for the 2013, 2014, and 2015 reports.

No USB funds collected from NorthWestern Energy customers are being released to Statewide USB funds.

If you have questions, please contact our USB staff at (406) 497-2491.

Sincerely,

Deb Martin Young  
Regulatory Support Services

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**Executive Summary**

*NorthWestern Energy is committed to administering Universal System Benefits (USB) programs and activities to efficiently deliver public purpose benefits to its Montana distribution customers to the fullest extent possible.*

Since 1999, electric customers in NorthWestern Energy's Montana service territory have funded nearly \$163 million of Universal System Benefits programs. Through USB, funding of low income programs have been increased, conservation and market transformation programs have continued, and renewable generation opportunities have been initiated for NorthWestern Energy's customers.

A total of \$9,447,558 was collected from NorthWestern Energy's electric distribution customers in 2016. This is about \$83,500 less than 2015 revenues with Large Customer revenues down by more than \$57,500 and non-Large Customer revenues down by nearly \$26,000 when compared to 2015 revenues.

The 2016 electric USB funds have been allocated to the categories consistent with guidelines provided in Montana Public Service Commission (MPSC) Orders No. 6679e and No. 7458. MPSC Order No. 6679e recognizes and allows for the pooling of electric and natural gas USB funds for residential audits, Free Weatherization for low income customers, and emergency energy assistance through Energy Share of Montana. MPSC Order No. 7458 directs 50% of the total electric USB revenues to Low Income activities, consistent with statute and proportionally reduces allocations between the Market Transformation and Local Conservation categories, and the Research and Development and the Renewable Generation categories.

The portfolio of low income, conservation, and renewable generation programs in 2016 is similar to 2015.

Separate of the electric USB funded activities, NorthWestern Energy customers fund additional residential Local Conservation and Low Income activities with natural gas USB funds. Other energy efficiency programs are included in NorthWestern Energy's electric and natural gas supply portfolios and are funded through supply rates.

Of the 2016 electric USB revenues, \$4,723,779, or 50% were allocated to Low Income activities by NorthWestern Energy separate of low income allocations from the Large Customer category. Large Customers self-directed an additional \$67,000 of their 2016

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electric USB funds to Low Income activities, bringing the total of 2016 electric USB funds directed to Low Income to \$ 4,790,779 or nearly 51% of the 2016 electric USB revenues.

NorthWestern Energy implements its USB programs and activities consistent with the requirements of legislation for USB, the Department of Revenue (DOR) administrative rules for USB Programs, and tariffs and orders of the MPSC. NorthWestern Energy's allocations for 2016 are consistent with these requirements and with well-established past practices. To the extent that substantial changes have been made to programmatic or funding levels outside of those required by MPSC Order, these changes are noted in the appropriate activity summary.

The activities for 2016 are summarized and the qualifying expenditures and credits claimed by NorthWestern Energy are documented with this report. *No funds are being released to the Statewide USB fund(s).* Large Customers that self-direct their funds are required to separately report those activities. To the extent that a Large Customer has informed NorthWestern Energy that it has directed funds to Low Income activities, the totals have been reported.

This report includes brief highlights of activity in each category, a summary of the allocations of 2016 electric USB funds by category and activity, and a summary of the energy and demand savings and new renewable resources resulting from the 2016 allocations. The report also includes updates on previous years' activities, and a summary by public purpose category of electric USB funding from 1999-2016.

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**UNIVERSAL SYSTEM BENEFITS REVENUES**

NorthWestern Energy’s Universal System Benefits Charge (USBC) tariffs went into effect January 1, 1999. As required in law, the tariffs were established to collect nearly \$8.6M (2.4% of 1995 revenues) in a weather-normal year based upon 1998 electric loads. The USBC generated \$9,447,558 in 2016. The table below shows that the USBC revenues are based upon electrical usage (kiloWatt hours or kWh), lists the USBC tariff rates by customer class, and the percentage of USB revenues each sector contributed in 2016.

<b>General Description</b>	<b>Tariffed Customer Class</b>	<b>Rate/kWh</b>	<b>Percent</b>
Residential	Residential	\$0.001334	33%
Commercial/Small Industrial	GS-1 & GS-2 under 1000 KW	\$0.001143	33%
Large Customer per USB	GS-1 & GS-2 over 1000 KW	\$0.000900	31%
Irrigation	Irrigation	\$0.001144	1%
Lighting	Lighting	\$0.003404	2%

A typical NorthWestern Energy residential customer using 750 kiloWatt hours (kWh)/month pays about \$1 each month for electric USBC. The Large Customer USB rate of \$0.0009 per kWh was set by the Montana legislature.

Large Customers are those customers with an individual qualifying load greater than 1,000 kiloWatt (kW) average monthly demand in the previous calendar year. By law, Large Customers may self-direct their USB funds to qualifying public purposes. The Large Customer USBC rate is applied to the qualifying load and all associated demand-metered accounts. Large Customers, representing 55 customers and their 510 accounts, make up \$2.89 M of the USB revenues.

Appendix 1 provides additional information regarding USB revenues by customer class.

**Segregated USB Account**

NorthWestern Energy segregates its electric and natural gas USB funds from other utility operating funds by depositing them into a separate interest-bearing bank account, per MPSC Order No. 6504a. In 2016, the net gain in interest to USB was \$1,664 of which \$1,131 was credited to the electric USB categories on a pro rata basis and the balance was credited to natural gas USB activities.

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**UNIVERSAL SYSTEM BENEFITS EXPENDITURES**

All electric USB funds collected from NorthWestern Energy customers in 2016 have been spent and/or committed to qualifying public purposes. No funds are being released to the Statewide USB fund(s).

This report includes information about the 2016 USB programs and activities for NorthWestern Energy customers. Sections are provided for Low Income, Local Conservation, Market Transformation, Renewable Resources, and Research and Development. A general summary of the Large Customer self-directed activities is provided. NorthWestern Energy does not “qualify” Large Customer self-directed activities and therefore, only provides the funding obligation and basic expenditure information. See Appendix 2 for a summary of the 2016 allocations and expenditures and Appendix 3 for energy savings and customer participation information.

NorthWestern Energy’s mix of programs and activities have been guided by the MPSC through Orders No. 5986 f, g, and i; Order No. 6514; Order No. 6504a; Order No. 6574c; and Orders No. 6679a, b, c, and e; Order No. 7458, advice from members of NorthWestern Energy’s USB Advisory Committee; input from the Montana Department of Health and Human Services (MDPHHS) and local Human Resource Councils (HRCs) for the Free Weatherization program; NorthWestern Energy’s experience in program design and implementation; and in response to customer needs and market conditions.

As provided for in the Administrative Rules of Montana and Montana Statute, NorthWestern Energy implemented qualifying internal utility programs and activities in 2016 and has financial commitments to implement additional activities/projects for completion in 2017. These programs and activities are described in this report. The breakdown between qualifying expenditures in the current year and financial commitments for completion in 2017 is documented in Appendices 2 and 3 to this report.

NorthWestern Energy requested, and was granted by the DOR, time extensions for projects for which the timelines have been modified requiring more time for completion as reported in the Addendums for the 2013, 2014, and 2015 Reports. None of the projects to which 2016 funds have been committed are expected at this time to extend beyond 2017.

**UNIVERSAL SYSTEM BENEFITS RESULTS**

From 1999 through 2016, NorthWestern Energy has delivered USB benefits to various customer classes and across all public purpose categories. General descriptions of the activities or programs for 2016, along with the funding total for the category, follow.

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***Large Customers-- \$2,893,024***

*Large Customers are allowed to self-direct their USB funds by Montana statute. Those who self-direct funds are required to file individual reports with the DOR regarding their activities. NorthWestern Energy is required to collect the USBC from these customers pursuant to Montana Statute through a tariff. Individual customers file reimbursement claims with NorthWestern Energy for which the utility processes payment. NorthWestern Energy does not pre-qualify Large Customer credits and bears no financial responsibility for any disallowance of their USB activities. Energy savings associated with Large Customer projects are not accounted for in NorthWestern Energy's report.*

Large Customer revenues are included in the utility's annual USB obligation. Large Customers may self-direct their funds and do not have a minimum funding requirement for Low Income nor an obligation to fund any of the utility's activities. Likewise, Large Customers are not eligible to participate in NorthWestern Energy's USBC funded Efficiency Plus (E+) programs.

In 2016, \$2,893,024 was collected from 55 Large Customers to meet their 2016 obligations. All but two of these customers self-directed all of their 2016 USB funds. Large Customers self-directed \$2,012,507 of 2016 funds toward energy reduction projects within their facilities, and have carried over \$809,696 for additional projects in 2017. Large Customers self-directed \$67,000 to Low Income activities in 2016.

The unclaimed 2016 Large Customer funds in the amount of \$3,821 and the 2016 USB account interest amount of \$346 were not sufficient to cover the NorthWestern Energy administrative costs for 2016 Large Customers of \$12,931. The shortfall was covered through unclaimed 2015 Large Customer funds in the amount of \$8,764. Using unclaimed Large Customer funds to cover the administrative costs and reallocating unclaimed funds to low income activities is consistent with past practice.

Claims to NorthWestern Energy for reimbursement are documented as received. Reimbursements are made after the USBC has been collected from the customer. NorthWestern sends reminders to the Large Customers of their reporting requirements to the DOR.

Consistent with statute, utilities are required to provide a list of Large Customers that self-directed USB funds in the previous year. The list of the 53 Large Customers on NorthWestern's system that self-directed funds follows.

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**Listing of Large Customers Self-Directing Funds in 2016**

AMERICAN CHEMET	PASTA MONTANA
ASH GROVE CEMENT	PHILLIPS66 PIPELINE (YELLOWSTONE PIPELINE & PHILLIPS 66 CARRIER)
ASPEN AIR	PHILLIPS66 REFINERY
BARRETT'S MINERALS	R Y TIMBER
BENEFIS HEALTH CARE	REC SILICON
BILLINGS CLINIC	ROCKY MOUNTAIN PIPELINE SYSTEM LLC
CALUMET MONTANA REFINING, LLC	ROCKY MOUNTAIN POWER
CEREAL FOOD PROCESSORS (GRAIN CRAFT)	ROSEBURG FOREST PRODUCTS
CHS	SAINT JAMES HOSPITAL
CITY OF BILLINGS	SAINT PATRICK HOSPITAL
CITY OF GREAT FALLS	SAINT VINCENT HOSPITAL
COMMUNITY MEDICAL CENTER	STILLWATER MINING COMPANY
EXPRESS PIPELINE LLC (DIVISION OF SPECTRA ENERGY)	SUN MOUNTAIN LUMBER
EXXONMOBIL	TALEN MONTANA, LLC
GENERAL MILLS	THE WESTERN SUGAR COOPERATIVE
GOLDEN SUNLIGHT MINES, INC. (BARRICK)	THOMPSON RIVER LUMBER
GRAYMONT WESTERN US INC.	TRICON TIMBER
IMERY'S TALC AMERICA, INC.	UNITED MATERIALS INCORPORATED
JUDITH GAP ENERGY LLC	UNITED PROPERTIES, INC.
MALTEUROP NORTH AMERICA, INC.	UNIVERSITY OF MONTANA
METRA PARK-BILLINGS	US AIR FORCE
MONTANA DEPARTMENT OF CORRECTIONS	US DEPT VETERANS AFFAIRS
MONTANA PRECISION PRODUCTS (SEACAST)	US PUBLIC HEALTH SERVICE (NATIONAL INSTITUTE OF HEALTH)
MONTANA RESOURCES	WESTERN ENERGY
MONTANA STATE UNIVERSITY - BILLINGS	WESTMORELAND RESOURCES INC.
MONTANA STATE UNIVERSITY - BOZEMAN	YELLOWSTONE DEVELOPMENT (YELLOWSTONE CLUB)
OLDCASTLE MATERIALS CEMENT HOLDINGS (FORMERLY HOLCIM)	

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***Low Income Activities--\$4,723,779***

*In Order No. 5986i (May 1999), the MPSC directed the utility to allocate 21% of the total electric USB funds collected to Low Income activities and to reallocate any unspent Large Customer funds to Low Income activities. In 2005, the MPSC issued Orders No. 6574c, 6679a and 6679b, all of which served to increase the allocation of electric USB funds to the Low Income sector. MPSC Order No. 6679e (December 2008) made permanent the Low Income bill discount levels and established a Low Income allocation guideline as part of the direction to guide allocations amongst the electric USB categories. In 2015, the MPSC issued Order No. 7458 increasing the funding of Low Income activities to 50% of the total annual electric USB revenues as now required by statute and increasing allocations to the Free Weatherization Program and Energy Share of Montana.*

NorthWestern Energy directed \$4,723,779 in 2016 electric USB funds to Low Income activities, or 50% of electric USB revenues. Large Customers reported self-directing an additional \$67,000 to Low Income activities bringing the total 2016 funds committed to Low Income to \$4,790,779 which is slightly more than 50% of the total funds collected.

Consistent with historic practice, unspent 2015 Large Customer funds have been directed first to covering the 2016 Large Customer administrative costs and the balance has been directed to the 2015 Low Income category as noted in Appendix 2 of the Addendum to the 2015 Report.

Appendix 4 to the 2016 report provides a summary of NorthWestern Energy's Electric USB allocations for 1999-2016 by category and better illustrates the Low Income funding changes.

Low Income USB funds are directed to a wide range of activities that benefit low income customers of the utility. Program offerings include bill assistance, weatherization and emergency energy assistance.

Households served by NorthWestern Energy that meet the LIEAP eligibility requirements receive bill assistance in the form of a discount. LIEAP eligibility guidelines are set by MDPHHS each heating season which is defined as November through April. LIEAP eligibility is set at up to 150% of the Federal poverty.

*LIEAP qualified customers may also qualify for the Free Weatherization Program and households with energy emergencies may receive assistance through Energy Share of Montana. More than 11,200 low income households were served in 2016 with electric USB funds. The financial impact of electricity costs on low income households was reduced through bill assistance, weatherization, and emergency energy assistance.*

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**Bill Assistance**

Consistent with MPSC Order No. 6679e the electric Low Income bill discount is 25% from November through April and 15% from May through October. Electric USB funds cover the electric Low Income discount. Separately, natural gas USB funds cover the natural gas USB Low Income Discount.

Customers qualifying for LIEAP, the federally funded heating assistance program, also receive the NorthWestern Energy bill discount. Customers may apply for LIEAP assistance through their local HRC. Participation in the bill discount in 2016 was about 3.5% less than the 2015 participation level. The funding of the electric Low Income discount totaled \$2,243,563 in 2016 for the 11,220 low income customers served. The amount of money required to fund the bill discount fluctuates annually based upon the number of customers enrolled, rates, and weather.

**The Free Weatherization Program**

NorthWestern Energy partners with MDPHHS and local HRCs to offer the Free Weatherization Program.

Through the history of this program, NorthWestern Energy has made modifications to the Free Weatherization Program contract with MDPHHS in an effort to better maximize the weatherization results of all funding sources for NorthWestern Energy low income customers.

Contract changes to streamline the program and better mirror federal program requirements prior to 2016 have been noted in previous reports. Increased funding to the Low Income category with MPSC Order No. 7458 increased funding of Free Weatherization Program. The 2016 Free Weatherization Program contract allowed for the purchase of new equipment to perform weatherization. Additionally, the percentage of funding for HRC overhead and/or administrative costs was increased. As noted in previous reports since 2013, USB funds up to 100% of weatherization costs for homes where NorthWestern Energy is listed as the primary heating vendor and up to 50% of weatherization costs for homes where the NorthWestern Energy electric customer does not list NorthWestern as the primary heating vendor. The 2016 contract changes (increase in overhead and/or administrative costs and the one-time allowance of funds to purchase weatherization equipment) resulted in a higher average cost per home weatherized for 2016 in comparison to previous years. Importantly, it does not reduce overall federal funding directed to weatherization of the homes of NorthWestern Energy's low income customers.

The 2016 Free Weatherization Program pooled unspent 2015 electric USB funds, along with 2016 electric USB funds and 2016 natural gas funds for a total of \$4,388,844. Of this \$474,947 was spent on the purchase of additional equipment for the HRCs to perform weatherization work. The HRCs performed low income weatherization work for 566 low

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income customers in 2016. An additional \$434,059 of 2016 electric funds has been committed to low income weatherization to be completed in 2017.

The Free Weatherization program includes a comprehensive energy audit, installation of air-sealing, hot water conservation, insulation measures and compact fluorescent light bulbs, and energy related health and safety improvements such as heating equipment tune-ups and repairs. Customers whose homes are heated primarily with electricity from NorthWestern Energy are considered for conversion to natural gas. Customers are provided with information to help them better manage their energy usage and to better understand their energy costs.

Customers served through the program provide comments back to NorthWestern Energy about their experiences through letters and customer response cards handed out by the HRCs.

- **“Thank you so much for the wonderful services, helping save energy and making our home a comfortable place to live.”**
- **“I was totally satisfied with everything that was done and with the workers and auditors. And I am so grateful for everything. It is truly a blessing!”**
- **“The whole process was easy, pleasant, and effective ....THANK YOU SO MUCH!”**
- **“Wonderful program. I can’t even express how much this means to me as a senior citizen. Thank you all so much. God Bless”**

### **Energy Share**

Energy Share of Montana offers assistance to those facing heating emergencies. It is intended to be a one-time, last resort safety net, used after all other resources have been exhausted. MPSC Order No. 7458 increased the minimum annual commitment of electric USB funds to Energy Share to \$289,000. Separately, natural gas USB funds in the amount of \$336,000 are also directed to Energy Share annually. As noted in the Addendum to the 2014 report, previously unspent Large Customer funds have been reallocated to Energy Share resulting in a total of \$808,936 being directed to Energy Share in 2016. Additional funds in the amount of \$157,395 in 2016 low income USB funds have been committed to Energy Share for payment in 2017.

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## **Local Conservation Activities-- \$ 717,796**

*The mix of energy conservation and market transformation programs offered by NorthWestern Energy with USB funding has been more limited as some programs have been shifted to the electric supply portfolio as demand side management (DSM) acquisition. The primary focus of the USBC-funded energy conservation and market transformation programs is to provide energy savings across customer sectors-- residential, commercial, institutional, and small industrial facilities on NorthWestern Energy's system. Customers meeting Large Customer USB criteria are not eligible to participate in these USBC funded programs.*

### **Efficiency Plus (E+) Energy Audit Program**

The E+ Audit for the Home is an on-site energy audit program for residential customers whose space and/or water heating fuels are delivered by NorthWestern Energy. It is a flagship of energy efficiency for NorthWestern Energy's non-low income customers. The E+ audit includes the installation of water-related energy efficiency measures that start saving right away. Customer education about where their energy dollar is going is supported through a blower door analysis, a natural gas appliance inspection for customers whose natural gas is delivered by NorthWestern Energy, and with specific suggestions for customers to better manage their homes or change behaviors to achieve greater energy-efficiency. Customers receive a report specific to their home and energy use habits. The report breaks out historical energy usage by end-use, provides recommendations on cost-effective weatherization measures, and offers tips on energy-efficient practices and natural gas appliance maintenance. The pool of 2015 and 2016 electric USB funds, along with 2016 natural gas funds allowed for the completion of 2,242 on-site residential audits in 2016.

NorthWestern Energy *electric baseload-only customers (no space heat or water heat fuels delivered by NorthWestern Energy)* are offered a separate audit service. The E+ Energy Survey is a mail-out audit for baseload customers consisting of a survey mailed to residential customers with specific consumption profiles. Customers complete and return the survey; they receive a report similar to the on-site E+ Audit report. In addition to breaking out the historical energy usage by appliance end-use, the report includes customer-specific recommendations for appliance usage in the customer's home. General weatherization and water heating recommendations are provided. With the combination of the on-site audit, the Free Weatherization program, and the E+ Energy Survey, almost every NorthWestern Energy residential customer has an energy efficiency assessment tool available for their home. More than 3,100 residential electric customers participated in the E+ Energy Survey program in 2016.

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Customers are provided the opportunity to comment to NorthWestern Energy regarding the E+ Audit for the Home:

- **“It's great to get a handle on the little things a homeowner can do to save energy and be more energy effective, thanks.”**
- **“This is an excellent beneficial and practical program. Thank you. The guys were great! Highly recommended!”**
- **“They were very informative & will help tremendously in my remodel. Thank you very much!”**
- **“The auditors taught me more in an hour then I'd learned in years. Excellent service & employees.”**

The E+ Energy Appraisal Program for Businesses focuses on identifying electric conservation opportunities for commercial customers on NorthWestern Energy's electric distribution system with a primary emphasis on smaller, “main street” businesses. In addition to the obvious lighting efficiency opportunities, many small businesses benefit from a greater understanding of where their energy dollar is going within their operation and the significance maintenance plans can have on their energy use and bills. In 2016, approximately 130 commercial facilities were evaluated through this program offering with electric USB funding from 2015 and 2016.

**Efficiency Plus (E+) Business Partners Program-New/Retrofit/Irrigation**

Most of the NorthWestern Energy's E+ Business Partners Program activity is funded as DSM through electric supply rates. Irrigation projects and those electric non-Large commercial Customers in Choice may qualify for the USB-funded portion of the program. Incentives are offered for energy conservation and load management projects in new and retrofit applications. Projects under this program frequently take more than a year to develop and implement.

In 2016, 17 irrigation efficiency improvement projects were funded and completed with 2016 USB dollars. While such custom rebates have been reported in past years, there were no qualifying custom rebates for commercial electric Choice customers for non-lighting electric efficiency improvements in 2016.

Customers qualifying for “Large Customer” USBC are not eligible for this USB funded program.

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***Market Transformation – \$266,924***

*Market Transformation is the process of bringing more energy efficient products, practices, and services into the marketplace with a goal of changing behaviors, practices, standards, and markets in such a way that the market, rather than an interventional program or activity, supports energy efficiency.*

**Commercial Lighting for Small Choice Customers**

Consistent with historic practice, commercial electric Choice customers have been eligible for lighting electric efficiency improvements. No projects were funded in 2016.

**ENERGY STAR® and New Homes**

Homes built to the Northwest ENERGY STAR standards are on the increase in Montana despite declines in the new housing market. USB funds provide outreach for the Northwest ENERGY STAR homes program including builder and verifier training and program promotion continues to be funded as a USB market transformation program. Additionally, USB funds were used to provide training and develop educational information related to Montana's adoption of the 2012 Energy Code for builders, trade allies and the general public.

**Building Operator Certification Training**

Training and education are important components in moving customers to more energy efficient products and practices that provide benefits to NorthWestern Energy's customers. The market transformation activities provide quality, regionally and nationally recognized training sessions to qualifying customers and trade allies at little or no cost to participants. These activities help support other electric energy efficiency programs of NorthWestern Energy. Building Operator Certification classes were held in 2016 specifically targeting public schools, government facilities, and non-profit hospitals.

**Regional Market Transformation**

NorthWestern Energy has directed 2016 market transformation funds to regional collaborative and training efforts. Technical training targeting commercial and industrial customers and trade allies is included in these activities.

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***Renewable Resources, and  
Research and Development--\$846,035***

*Renewable energy development as a public purpose category was initiated with the Universal System Benefits programs in NorthWestern Energy's service territory in 1999. The Research and Development activities funded in 2016 were tied to renewable resources, so the two categories have been combined for this discussion. Costs for the separate categories are broken out in the appendices. Projects that maximize the partnering of funding, education, and that increase geographic representation on NorthWestern's electric system are encouraged.*

When the USBC was established in 1999, there were few renewable generation installers in Montana. Installation costs of solar Photovoltaic (PV) projects were high and almost all net-metered systems received USB funding for at least a portion of the installation costs. Through the years, USBC has provided funding toward projects without net-metering, most notably for some solar thermal systems and one biomass project. Residential solar PV projects represent the majority of the projects receiving USB funds. A limited number of small scale wind projects have received funding. In the early years of USB funding, a number of schools received funds toward PV and/or small scale wind projects. At schools, the systems provide an educational opportunity for students to learn about the capabilities of renewable generation.

The initial cost to install small scale solar PV systems has been declining in recent years. There are now 40 qualified installers to support the market. As the installation costs have declined and the installer network has grown, the USB incentives for PV systems on homes and businesses have been reduced and have now been eliminated. Some projects to which funds were committed before the incentives were eliminated continue to be completed and are reported each year. Currently, proposals are considered for incentives for small scale solar PV systems for non-profit and public buildings, such as libraries, non-profit community centers, and schools. Custom proposals are considered on a case-by-case basis depending upon geographic representation criteria and availability of funds.

Fixed dollar per Watt incentives continue to be available to small scale wind projects on a case-by-case basis.

There are now more than 1,800 net-metered renewable generators in the NorthWestern Energy service territory. Of those, about 300 were connected in 2016 without USB funding and most are residential solar PV projects.

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With USB funding for a portion of the project, 32 net-metered solar PV projects completed in 2016. The majority were funded with 2014 dollars. Projects completed in 2016 were installed on private residences or low income homes, schools, and non-profit facilities.

Projects completed in 2016 with funds from previous years are noted in the Addendums to the 2013, 2014, and 2015 reports.

The following table summarizes renewable projects that have received USB funding since USB funding began in 1999.

<b>USB Renewable Projects 1999-2016</b>		
<b>Facility Type</b>	<b>#</b>	<b>KW</b>
Commercial Projects	67	629.94
Fire Stations	41	108.06
Irrigation Projects	6	103.52
Low Income	60	292.15
Non-Profit Projects	63	326.28
Private Residences	831	2,653.96
Schools	86	450.47
Other Public Buildings	22	333.09
Biomass	1	750.00
Solar Thermal	19	NA
Biodiesel	2	15.00

NorthWestern Energy continues to consult with its USB Renewable Advisory Subcommittee regarding program modifications and allocations of Renewable Resources and Research and Development funds and works to maintain a mix of projects with diverse geographic distribution, and to a mix of public and non-profit electric customers.

NorthWestern Energy has instituted safety and experience qualification requirements for solar PV and small-scale wind installers. Since 2009, projects must be installed by a “qualified installer” that meets safety and experience requirements in order for projects to receive USB renewable resource funds. At the end of 2016, 40 firms met the solar PV installer qualification requirements and seven met the small-scale wind installer qualification requirements. These installers are listed on NorthWestern Energy’s website. The Installer listing is updated as installers are added or deleted based upon their meeting the qualified installer requirements.

USB funds are used in partnership with the Montana Renewable Energy Association (MREA) and the Occupational Safety and Health Administration (OSHA) to provide safety training to installers of small renewable generation systems. NorthWestern Energy

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sponsored 43 training sessions throughout the state in 2016. These sessions covered a variety of topics including, OSHA electrical safety, Four Hazards Training, Fall Protection, NFPA 70E, utility worker and electrical inspector training. Additional training for installers, home inspectors and electrical inspectors has been committed to for 2017. The qualified installers, as well as several program contractors, provide education and project development services.

Seminars, tours, workshops and exhibits for individuals interested in renewable energy technologies and sustainable building practices continue to be funded.

NorthWestern Energy initiated the E+ Green Power program in 2003. Through this program, customers may elect to purchase the environmental benefits associated with renewable energy generated in the Northwest and Wyoming. Consistent with historic practice, when revenues of the program are greater than expenses, funds are directed to the Renewable Resources category and when the program expenses exceed revenues, USB funds are used to support the program. In 2016, funds have been directed back to the renewable generation category. Generally, customer participation in the program is stable with a few customers enrolling or leaving each year. The majority of participating customers are homeowners, but a handful of commercial accounts purchase a substantial number of the E+ Green blocks of environmental benefits associated with renewable generation.

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## **Conclusion**

In every year since the inception of USB, NorthWestern Energy's activities have covered all public purpose categories—Low Income, Local Conservation, Market Transformation, Renewable Resources and Research and Development, *and*, the offerings have included all customers—low income, senior citizens, and other residential customers; main street businesses, schools and also government, office buildings, irrigation, and small industrial companies (with the exception of the Large Customers, who may self-direct USB funds).

Programs and funding activities continue to be coordinated by NorthWestern Energy staff with much of the implementation work being performed by others. The Free Weatherization Program is a cooperative effort between NorthWestern Energy, MDPHHS, and the local HRCs. The HRCs also qualify customers for the utility's bill discount, free weatherization and emergency bill assistance through Energy Share.

NorthWestern Energy collects the natural gas USBC from its customers and implements Low Income bill assistance, emergency energy assistance, and free weatherization; and residential conservation activities. MPSC Order No. 6679e recognizes and allows for the pooling of electric and natural gas USB funds for residential on-site audits, Free Weatherization for low income customers, and emergency assistance through Energy Share of Montana. The natural gas USB activities are funded and implemented consistent with law and MPSC direction. Additional cost-effective energy efficiency, DSM programs for NorthWestern Energy customers are funded through electric and natural gas supply rates as part of NorthWestern Energy's supply portfolios.

Addendums for the years 2013, 2014 and 2015 Reports are included to provide an update of funded USB activities that were completed this past year.

Find out more about NorthWestern Energy USB programs by visiting [www.NorthWesternEnergy.com/Eplus](http://www.NorthWesternEnergy.com/Eplus) .

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# **Appendices 1-4**

**Universal System  
Benefits Activities  
2016 Annual Report**

	USBC kWh (Load)	USBC Revenue By Class	% of USB Revenue By Class
<b>Residential</b>			
Residential	2,362,272,035	\$ 3,149,636	33%
<b>General Service</b>			
GS-1/GS-2 < 1000 kW	2,720,297,366	\$ 3,084,889	33%
Irrigation	98,437,061	\$ 111,845	1%
Lighting	61,115,975	\$ 208,164	2%
<b>Total Non-Large Customer</b>	<b>5,242,122,437</b>	<b>\$ 6,554,534</b>	<b>69%</b>
<b>Large Customer</b>			
GS-1/GS-2 > 1000 kW and Special Contracts	3,213,802,960	\$ 2,893,024	31%
<b>Total USBC</b>	<b>8,455,925,397</b>	<b>\$ 9,447,558</b>	<b>100%</b>

**Note:** The Residential class includes income-qualified customers receiving the 25% Low-Income discount from November 1st - April 30th and the 15% Low-Income discount from May 1st - October 31st. The discount is applied to the total bill, including the Universal System Benefits Charge.

	Revenue Allocation		Spent in 2016	Contracted - Complete in 2017	Allocation & Expenses
	per Order 7458	Reallocation <sup>(a)</sup>			
<b>Local Conservation</b>	<b>600,969</b>	<b>116,827</b>	561,247	156,549	<b>717,796</b>
E+ Residential Audit/Sm. Comm Audit			361,703	156,549	518,252
E+ Business Partners / Irrigation Projects			83,945	-	83,945
Promotion			83,195	-	83,195
Labor			32,193	-	32,193
Admin. Non-labor			283	-	283
Interest Income			(72)	-	(72)
Local Conservation Summary			561,247	156,549	717,796
<b>Market Transformation</b>	<b>383,751</b>	<b>(116,827)</b>	256,924	10,000	<b>266,924</b>
E+ Commercial Lighting			-	-	-
Motor Management Training			-	-	-
Energy Star Homes			137,520	-	137,520
Building Operator Certification			33,272	10,000	43,272
Commercial Industrial Training & Conference			39,060	-	39,060
Promotion			24,190	-	24,190
Labor			19,983	-	19,983
Admin. Non-labor			2,944	-	2,944
Interest Income			(46)	-	(46)
Market Transformation Summary			256,924	10,000	266,924
<b>Renewable Resources</b>	<b>574,269</b>	<b>0</b>	45,928	528,341	<b>574,269</b>
Generation/Education			-	528,341	528,341
Green Power Product			(12,683)	-	(12,683)
Promotion			1,969	-	1,969
Labor			55,857	-	55,857
Admin. Non-labor			854	-	854
Interest Income			(69)	-	(69)
Renewable Resources Summary			45,928	528,341	574,269
<b>Research &amp; Development</b>	<b>271,766</b>	<b>0</b>	49,335	222,432	<b>271,766</b>
R&D/ Infrastructure			29,200	222,432	251,632
Battery Storage			1,131	-	1,131
Promotion			9,665	-	9,665
Labor			9,157	-	9,157
Admin. Non-labor			214	-	214
Interest Income			(33)	-	(33)
Research & Development Summary			49,335	222,432	271,766
<b>Low Income</b>	<b>4,723,779</b>	<b>0</b>	4,132,324	591,454	<b>4,723,779</b>
Bill Assistance			2,243,563	-	2,243,563
Free Weatherization			1,526,000	434,059	1,960,059
Elec Wx Incentives			27,971	-	27,971
Fuel Switch Analyses			3,600	-	3,600
Energy Share			289,000	157,395	446,395
Promotion			8,738	-	8,738
Labor			33,153	-	33,153
Admin. Non-labor			864	-	864
Interest Income			(566)	-	(566)
Low Income Summary			4,132,324	591,454	4,723,779
<b>Large Customer</b>	<b>2,893,024</b>	<b>0</b>	2,083,329	809,696	<b>2,893,024</b>
Self-Directed Energy Reduction			2,012,507	809,696	2,822,203
Self-Directed to Low Income			67,000	-	67,000
Labor			12,931	-	12,931
Interest Income			(346)	-	(346)
NWE Allocated from 2015 to cover LC Expense <sup>(b)</sup>			(8,764)	-	(8,764)
Large Customer Summary			2,083,329	809,696	2,893,024
<b>Unallocated</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Totals</b>	<b>9,447,558</b>	<b>0</b>	<b>7,129,086</b>	<b>2,318,472</b>	<b>9,447,558</b>
<b>2016 USB Revenues less Expenses and Contractual Commitments</b>					<b>-</b>

<sup>(a)</sup> Allocations have been adjusted between Market Transformation and Local Conservation consistent with past practice.

<sup>(b)</sup> The 2015 Large Customer Admin Costs of \$12,931 less the interest income of \$346 exceeded the amount of unclaimed 2016 Large Customer funds of \$3,821. NWE has committed unclaimed 2015 Large Customer funds in the amount of \$8,764 to cover the deficit.

**2016 USB FUNDING AND EXPENDITURE SUMMARY**

USB Category	Allocation of 2016 funds based on Order 7458	Percentage by Category	Reallocation of 2016 funds	Percentage by Category	Allocation w/Lrg Cust funds self-directed to LI <sup>(a)</sup>	Percentage by Category	Total Electric USB Funds Spent in 2016	2016 Electric USB Funds Contracted to Spend in 2017
Local Conservation	\$ 600,969	6%	\$ 717,796	8%	\$ 717,796	8%	\$ 561,247	\$ 156,549
Market Transformation	\$ 383,751	4%	\$ 266,924	3%	\$ 266,924	3%	\$ 256,924	\$ 10,000
Renewables	\$ 574,269	6%	\$ 574,269	6%	\$ 574,269	6%	\$ 45,928	\$ 528,341
Research & Development	\$ 271,766	3%	\$ 271,766	3%	\$ 271,766	3%	\$ 49,335	\$ 222,432
Low Income	\$ 4,723,779	50%	\$ 4,723,779	50%	\$ 4,790,779	51%	\$ 4,132,324	\$ 591,454
Large Customer	\$ 2,893,024	31%	\$ 2,893,024	31%	\$ 2,826,024	30%	\$ 2,083,329	\$ 809,696
	<b>\$ 9,447,558</b>	<b>100%</b>	<b>\$ 9,447,558</b>	<b>100%</b>	<b>\$ 9,447,558</b>	<b>100%</b>	<b>\$ 7,129,086</b>	<b>\$ 2,318,472</b>

**2016 LOW INCOME FUNDING SUMMARY**

Low Income Category	
Bill Assistance	\$ 2,243,563
Free Weatherization	\$ 1,526,000
Elec Wx Incentives	\$ 27,971
Fuel Switch Analysis	\$ 3,600
Energy Share	\$ 289,000
NWE Promotion	\$ 8,738
NWE Labor	\$ 33,153
NWE Admin. Non-labor	\$ 864
USB Interest & Svc Chg	\$ (566)
Self-Directed Large Customer	\$ 67,000
<b>Subtotal:</b>	<b>\$ 4,199,324</b>
<b>Low Income share of 2016 Electric USB revenues :</b>	<b>44.4%</b>

**2016 ENERGY SAVINGS & RENEWABLE RESOURCES ESTIMATES**

	Savings & Resources acquired in 2016 w/ 2016 \$		
	aMW	MWH	MW
Local Conservation	0.143	1,253	0.297
Market Transformation	0.074	651	-
Renewables	-	-	-
Research & Development	NA	NA	NA
Low Income	0.023	199	0.015
Large Customer <sup>(b)</sup>	NA	NA	NA
	<b>0.240</b>	<b>2,103</b>	<b>0.312</b>

	Projected Savings & Resources to acquire in 2017 w/ 2016 \$ (c)		
	aMW	MWH	MW
Local Conservation	0.008	69	0.014
Market Transformation	0.022	196	-
Renewables	0.032	284	0.216
Research & Development	NA	NA	NA
Low Income	0.003	29	-
Large Customer <sup>(b)</sup>	NA	NA	NA
	<b>0.066</b>	<b>578</b>	<b>0.230</b>
<b>Total Savings &amp; Resources</b>	<b>0.306</b>	<b>2,681</b>	<b>0.542</b>

**2016 ELECTRIC USB PARTICIPATION SUMMARY**

Electric USB Activity by Category	Quantity	Units
<b>Conservation</b>		
Residential Onsite Audits	1,876	homes
Residential Mail out Audits	2,652	homes
Business Appraisals	112	businesses
Business Partners / Irrigation	18	projects
Business Partners / Small Choice	-	projects
<b>Market Transformation</b>		
Commercial Lighting	-	projects
NWE Building Operator Certification	21	people
Motor Training	-	people
Market Transformation Training	38	people
<b>Renewables</b>		
Generation / Education	12	projects
<b>Research &amp; Development</b>		
Renewable Energy Seminars/Workshops	300	attendees
<b>Low-Income</b>		
Bill Assistance	11,220	households
Free Weatherization	376	homes
Energy Share	1,612	households

<sup>(a)</sup> Large Customers may self-direct their USB dollars to energy saving and renewable activities in their own facilities, or to Low Income activities. In 2016 with 2016 funds, Large Customers self-directed a total of \$67,000 to Low-Income.

<sup>(b)</sup> Large Customer energy savings estimates are reported by individual large customers and are not available in this report.

<sup>(c)</sup> Projected Savings & Resources are based on contracts that were in place at the end of 2016. Actual results will be reported in 2017.

Annual Electric USB Allocation

Original Allocation per D97.7.90, Order 5986g (a)

	% by Category	\$ by Category
Local Conservation	20%	1,704,748
Market Transformation	13%	1,069,860
Renewables	12%	1,051,686
Research & Development	3%	212,437
Low-Income	21%	1,866,219
Large Customers	31%	2,981,806
	100%	8,886,756

Current Allocation per D2015.7.58, Order 7458 (d)

	% by Category	\$ by Category
Local Conservation	7.00%	623,468
Market Transformation	4.00%	398,118
Renewables	8.00%	713,030
Research & Development	2.00%	164,679
Low-Income	50.00%	4,916,169
Large Customers	29.00%	3,016,873
	100%	9,832,336

Historic Allocation of Electric USB Funds (b)

Year	Total Electric USB Funds	Large Customers	Low Income (c)	Supplemental Low Income (d)	Total Low Income	Conservation	Market Transformation	Renewables	Research Development	Irrigation
1999	7,789,477	2,715,626	1,666,669	-	1,666,669	1,622,585	721,031	654,449	409,117	-
2000	8,631,017	2,942,611	1,287,513	525,000	1,812,513	1,461,945	1,140,529	1,070,900	202,519	-
2001	8,200,995	2,469,907	1,294,533	500,000	1,794,533	1,660,401	852,251	1,113,545	64,328	246,030
2002	8,237,435	2,437,538	1,863,220	-	1,863,220	1,439,131	950,714	864,334	188,252	494,246
2003	8,522,939	2,543,165	1,986,700	725,604	2,712,304	1,142,524	1,077,120	916,703	114,849	16,274
2004	8,886,755	2,965,994	2,247,698	-	2,247,698	1,573,264	1,094,692	860,226	144,881	-
2005	9,018,197	3,046,997	2,387,502	586,394	2,973,896	1,446,761	586,332	838,336	125,876	-
2006	9,329,518	3,033,322	3,858,505	-	3,858,505	1,487,658	26,908	812,829	110,296	-
2007	9,410,198	3,063,311	4,170,445	-	4,170,445	1,315,910	77,023	673,328	110,179	-
2008	9,625,630	3,145,276	3,408,329	-	3,408,329	1,866,896	136,441	974,290	94,396	-
2009	9,361,818	3,146,326	3,146,326	-	3,146,326	1,340,555	444,078	1,362,237	171,054	-
2010	9,191,653	2,740,669	3,139,869	-	3,139,869	1,579,218	201,753	1,193,053	337,091	-
2011	9,367,205	2,748,767	3,221,373	-	3,221,373	1,483,095	344,107	1,243,669	326,195	-
2012	9,372,359	2,769,720	3,440,408	-	3,440,408	1,406,566	302,922	1,112,906	339,837	-
2013	9,485,951	2,840,538	3,879,499	-	3,879,499	1,238,110	243,855	979,534	304,414	-
2014	9,543,001	2,890,506	3,530,178	-	3,530,178	1,518,042	176,454	1,015,155	412,666	-
2015	9,531,041	2,950,657	4,765,520	-	4,765,520	671,655	304,518	729,125	109,566	-
2016	9,447,558	2,893,024	4,723,779	-	4,723,779	717,796	266,924	574,269	271,766	-
	162,952,747	51,095,196	54,018,065	2,336,999	56,355,064	24,972,112	8,947,651	16,988,889	3,837,282	756,549

USB Categories

Allocation as % of Revenue by Category	100%	31%	35%	15%	5%	10%	2%	0%
Allocation as % of Revenues, excluding Large Customer Revenues	100%	50%	22%	8%	15%	8%	3%	1%

(a) SB 390 required that utilities collect 2.4% of their 1995 electric revenues to fund approved USB activities, and direct 17% of the total to the low income category. The allocation set forth by MPSC in Order 5986g increased NorthWestern Energy's low-income requirement to 21% of total revenues. In December 2008 MPSC issued Order 6679e which increased the allocations to Low Income and adjusted allocations to the other non-Large Customer Categories. MPSC Order 7458 increased to 50% the allocation to Low Income and proportionally reduced non-Large Customer categories. These Orders did not affect the allocation for Large Customers, they effectively reduced the amount of USB funds available for other non-Low Income USB categories.

(b) The historic allocation table illustrates the expenditure or direction of electric USB by category from 1999 through 2016.

(c) This column summarizes all funds allocated to low-income activities by NorthWestern Energy, except those noted in (d). In addition to funds allocated by NorthWestern Energy, Large Customers have self-directed \$2,671,962 to low-income activities since 1999.

(d) 2003 Supplemental low income funds reallocated based on a recommendation from the Governor's Energy Consumer Protection Taskforce, and MPSC Order 6514. 2005 Supplemental low-income funds reallocated based on a stipulation reached between NWE, District XI HRC, AARP, RNP & NRDC in Docket D2004.6.90, Order 6574c.

# Addendum **2015 Report**

Universal System  
Benefits Activities  
**2016 Annual Report**

**ADDENDUM  
to the  
2015 Report**



The 2015 NorthWestern Energy USBC revenues totaled \$9,531,040. Of this, \$5,980,704 was spent on projects completed in 2015, and \$3,173,729 was spent on projects completed in 2016, leaving a balance of \$376,607 for projects to complete in 2017.

The projects associated with \$3,173,729 of 2015 USB funds, including \$917,729 of Large Customer self-directed activities were completed in 2015. Included in the 2016 expenditures, NorthWestern Energy reallocated \$8,764 of unspent Large Customer 2015 funds to cover a portion of the deficit in the 2016 Large Customer category consistent with historic practice. The results are included in Appendix 2 of this addendum.

Additional unspent 2015 Large Customer funds identified were reallocated to Low Income activities with \$1,090 directed to Energy Share and \$2,545 directed to Free Weatherization to be completed in 2017.

NorthWestern Energy requested and was granted extensions from the Department of Revenue as allowed per ARM 49.29.111 for renewable generation and research and development projects totaling \$372,972 for completion in 2017.

Updated results are provided in the 2015 Addendum in Appendices 2 and 3 (p. 2015-2 and p. 2015-3).

	Revenue Allocation		Spent in 2015	Spent in 2016	Contracted - Complete in 2017	Allocation & Expenses
	per Order 7458	Reallocation <sup>(a)</sup>				
<b>Local Conservation</b>	<b>595,752</b>	<b>75,903</b>	425,692	245,963	-	<b>671,655</b>
E+ Residential Audit/Sm. Comm Audit			218,793	245,963	-	464,756
E+ Business Partners / Irrigation Projects			80,660	-	-	80,660
Promotion			91,923	-	-	91,923
Labor			34,141	-	-	34,141
Admin. Non-labor			369	-	-	369
Interest Income			(194)	-	-	(194)
Local Conservation Summary			425,692	245,963	-	671,655
<b>Market Transformation</b>	<b>380,420</b>	<b>(75,903)</b>	304,518	-	-	<b>304,518</b>
E+ Commercial Lighting			18,813	-	-	18,813
Motor Management Training			13,122	-	-	13,122
Energy Star Homes			131,478	-	-	131,478
Building Operator Certification			55,306	-	-	55,306
Commercial Industrial Training & Conference			44,101	-	-	44,101
Promotion			16,541	-	-	16,541
Labor			19,472	-	-	19,472
Admin. Non-labor			5,809	-	-	5,809
Interest Income			(124)	-	-	(124)
Market Transformation Summary			304,518	-	-	304,518
<b>Renewable Resources</b>	<b>681,333</b>	<b>47,793</b>	41,805	335,893	351,427	<b>729,125</b>
Generation/Education			1,000	335,893	351,427	688,320
Green Power Product			(19,490)	-	-	(19,490)
Promotion			5,730	-	-	5,730
Labor			53,102	-	-	53,102
Admin. Non-labor			1,685	-	-	1,685
Interest Income			(222)	-	-	(222)
Renewable Resources Summary			41,805	335,893	351,427	729,125
<b>Research &amp; Development</b>	<b>157,358</b>	<b>(47,793)</b>	73,210	14,811	21,545	<b>109,566</b>
R&D/ Infrastructure			56,490	14,811	21,545	92,846
Battery Storage			1,708	-	-	1,708
Energy Corps			0	-	-	0
Promotion			5,869	-	-	5,869
Labor			9,057	-	-	9,057
Admin. Non-labor			137	-	-	137
Interest Income			(51)	-	-	(51)
Research & Development Summary			73,210	14,811	21,545	109,566
<b>Low Income</b>	<b>4,765,520</b>	<b>0</b>	3,114,827	1,650,693	-	<b>4,765,520</b>
Bill Assistance			2,340,963	-	-	2,340,963
Free Weatherization			418,950	1,469,844	-	1,888,794
Elec Wx Incentives			17,465	-	-	17,465
Fuel Switch Analyses			2,500	-	-	2,500
Energy Share			289,000	180,849	-	469,849
Promotion			9,789	-	-	9,789
Labor			35,727	-	-	35,727
Admin. Non-labor			1,983	-	-	1,983
Interest Income			(1,551)	-	-	(1,551)
Low Income Summary			3,114,827	1,650,693	-	4,765,520
<b>Large Customer</b>	<b>2,950,657</b>	<b>0</b>	2,020,653	926,368	3,635	<b>2,950,657</b>
Self-Directed Energy Reduction			1,998,831	880,819	-	2,879,650
Self-Directed to Low Income			20,000	36,785	-	56,785
Labor			14,054	-	-	14,054
Interest Income			(960)	-	-	(960)
NWE Reallocate to Energy Share			-	-	1,090	1,090
NWE Reallocate to Free Weatherization			-	-	2,545	2,545
NWE Allocated from 2014 to cover LC Expense <sup>(b)</sup>			(11,272)	-	-	(11,272)
NWE Allocated from 2015 to cover LC Expense <sup>(b)</sup>			-	8,764	-	8,764
Large Customer Summary			2,020,653	926,368	3,635	2,950,656
<b>Unallocated</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Totals</b>	<b>9,531,040</b>	<b>0</b>	<b>5,980,704</b>	<b>3,173,729</b>	<b>376,607</b>	<b>9,531,041</b>
<b>2015 USB Revenues less Expenses and Contractual Commitments</b>						<b>-</b>

<sup>(a)</sup> Allocations have been adjusted between Market Transformation and Local Conservation; and, between Research and Development and Renewable Generation consistent with past practice.

<sup>(b)</sup> The 2015 Large Customer Admin Costs of \$14,054 less the interest income of \$960 exceeded the amount of unclaimed 2015 Large Customer funds of \$1,822. NWE has committed unclaimed 2014 Large Customer funds in the amount of \$11,272 to cover the deficit.

**PROJECTS COMPLETED IN 2016 WITH 2015 FUNDS**

USB Category	Projects Completed in 2016 with 2015 Funds			MW
	aMW	MWH	2015 USB \$	
Local Conservation	0.018	153	0.033	
Market Transformation	-	-	-	
Renewables	0.022	195	0.149	
Research & Development	NA	NA	NA	
Low Income	0.022	192	0.015	
Large Customer	NA	NA	NA	
	<b>0.062</b>	<b>540</b>	<b>0.196</b>	

Program Participation Summary			
USB Category / Program Segment	Quantity	Units	
<b>Conservation</b>			
Residential Onsite Audits	366	homes	
Residential Mail out Audits	517	homes	
Business Appraisals	22	businesses	
Business Partners/Irrigation	-	projects	
Business Partners/Small Choice	-	projects	
<b>Market Transformation</b>			
Commercial Lighting	-	projects	
NWE Building Operator Certification	-	people	
Motor Training	-	people	
<b>Renewables</b>			
Generation / Education	9	projects	
<b>Research &amp; Development</b>			
Renewable Energy Seminars/Workshops	65	attendees	
<b>Low-Income</b>			
Bill Assistance	-	households	
Free Weatherization	190	homes	
Energy Share	-	households	

**TOTAL OF PROJECTS COMPLETED WITH 2015 FUNDS**

USB Category	Energy Savings & Renewable Resource Estimates			MW
	aMW	MWH	2015 USB \$	
Local Conservation	0.155	1,355	0.236	
Market Transformation	0.337	2,953	-	
Renewables	0.022	195	0.149	
Research & Development	NA	NA	NA	
Low Income	0.037	325	0.077	
Large Customer	NA	NA	NA	
	<b>0.551</b>	<b>4,828</b>	<b>0.462</b>	

Program Participation Summary			
USB Category / Program Segment	Quantity	Units	
<b>Conservation</b>			
Residential Onsite Audits	2,094	homes	
Residential Mail out Audits	2,112	homes	
Business Appraisals	149	businesses	
Business Partners/Irrigation	21	projects	
Business Partners/Small Choice	-	projects	
<b>Market Transformation</b>			
Commercial Lighting	3	projects	
NWE Building Operator Certification	35	people	
Motor Training	55	people	
Market Transformation Training	48	people	
<b>Renewables</b>			
Generation / Education	9	projects	
<b>Research &amp; Development</b>			
Renewable Energy Seminars/Workshops	1,167	attendees	
<b>Low-Income</b>			
Bill Assistance	11,629	households	
Free Weatherization	501	homes	
Energy Share	1,322	households	

# Addendum **2014 Report**

Universal System  
Benefits Activities  
**2016 Annual Report**

**ADDENDUM  
to the  
2014 Report**



The 2014 NorthWestern Energy USBC revenues totaled \$9,543,001. Of this, \$6,700,225 was spent on projects completed in 2014, and \$2,180,014 was spent on projects completed in 2015, \$508,507 was completed in 2016, leaving a balance of \$154,254 to complete in 2017.

Projects associated with \$508,507, including \$3,087 of unspent Large Customer 2014 funds to Energy Share of Montana were completed. The results are included in Appendix 2 of this addendum.

Additional 2014 funds were reallocated by NorthWestern to Low Income activities as the result of 2014 Renewable generation projects that did not complete or were completed at a lower cost than planned. Of the \$47,953 reallocated funds, \$33,567 was directed to Free Weatherization and \$14,386 was directed to Energy Share for completion in 2017.

NorthWestern Energy requested and was granted extensions from the Department of Revenue as allowed per ARM 49.29.111 for renewable generation and research and development projects totaling \$106,301 for completion in 2017.

Updated results are provided in the 2014 Addendum in Appendices 2 and 3 (p. 2014-2 and p. 2014-3).

	Revenue Allocation		Spent in 2014	Spent in 2015	Spent in 2016	Contracted - Complete in 2017	Allocation & Expenses
	per Order 6679e	Reallocation <sup>(a)</sup>					
<b>Local Conservation</b>	<b>1,120,869</b>	<b>397,174</b>	<b>1,018,042</b>	<b>500,000</b>	<b>-</b>	<b>-</b>	<b>1,518,042</b>
E+ Residential Audit/Sm. Comm Audit			606,705	500,000	-	-	1,106,705
E+ Business Partners / Irrigation Projects			273,050	-	-	-	273,050
Promotion			75,799	-	-	-	75,799
Labor			33,191	-	-	-	33,191
Admin. Non-labor			29,602	-	-	-	29,602
Interest Income			(304)	-	-	-	(304)
Local Conservation Summary			1,018,042	500,000	-	-	1,518,042
<b>Market Transformation</b>	<b>715,735</b>	<b>(539,281)</b>	<b>176,454</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>176,454</b>
E+ Commercial Lighting			603	-	-	-	603
Motor Management Training			-	-	-	-	-
Energy Star Homes			74,182	-	-	-	74,182
Building Operator Certification			-	-	-	-	-
Commercial Industrial Training & Conference			37,660	-	-	-	37,660
Promotion			16,288	-	-	-	16,288
Labor			19,678	-	-	-	19,678
Admin. Non-labor			28,237	-	-	-	28,237
Interest Income			(194)	-	-	-	(194)
Market Transformation Summary			176,454	-	-	-	176,454
<b>Renewable Resources</b>	<b>1,281,883</b>	<b>(266,728)</b>	<b>76,252</b>	<b>512,841</b>	<b>295,455</b>	<b>130,607</b>	<b>1,015,155</b>
Generation/Education			13,788	512,841	295,455	82,654	822,084
Green Power Product			566	-	-	-	566
Promotion			7,632	-	-	-	7,632
Labor			52,197	-	-	-	52,197
Admin. Non-labor			2,416	-	-	-	2,416
Interest Income			(347)	-	-	-	(347)
NWE Reallocated to Free Weatherization			-	-	-	33,567	33,567
NWE Reallocated to Energy Share			-	-	-	14,386	14,386
Renewable Resources Summary			76,252	512,841	295,455	130,607	932,501
<b>Research &amp; Development</b>	<b>296,059</b>	<b>116,607</b>	<b>100,798</b>	<b>78,256</b>	<b>209,965</b>	<b>23,647</b>	<b>412,666</b>
R&D/ Infrastructure			72,282	45,525	202,896	23,647	320,503
Battery Storage			3,705	-	-	-	3,705
Energy Corps			12,330	32,731	7,269	-	52,330
Promotion			3,773	-	-	-	3,773
Labor			8,563	-	-	-	8,563
Admin. Non-labor			225	-	-	-	225
Interest Income			(80)	-	-	-	(80)
Research & Development Summary			100,798	78,256	209,965	23,647	389,019
<b>Low Income</b>	<b>3,237,949</b>	<b>292,229</b>	<b>3,137,043</b>	<b>393,135</b>	<b>-</b>	<b>-</b>	<b>3,530,178</b>
Bill Assistance			2,421,608	-	-	-	2,421,608
Free Weatherization			408,725	307,977	-	-	716,701
Elec Wx Incentives			16,916	-	-	-	16,916
Fuel Switch Analyses			2,400	-	-	-	2,400
Energy Share			239,000	85,158	-	-	324,158
Promotion			13,512	-	-	-	13,512
Labor			35,324	-	-	-	35,324
Admin. Non-labor			1,693	-	-	-	1,693
Interest Income			(877)	-	-	-	(877)
Returned Low Income Funds from DPHHS <sup>(b)</sup>			(1,257)	-	-	-	(1,257)
Low Income Summary			3,137,043	393,135	-	-	3,530,178
<b>Large Customer</b>	<b>2,890,506</b>	<b>(0)</b>	<b>2,191,636</b>	<b>695,783</b>	<b>3,087</b>	<b>-</b>	<b>2,890,506</b>
Self-Directed Energy Reduction			2,063,099	632,629	-	-	2,695,728
Self-Directed to Low Income			123,538	51,882	-	-	175,420
Labor			12,621	-	-	-	12,621
Interest Income			(783)	-	-	-	(783)
NWE Reallocated to Energy Share			-	-	3,087	-	3,087
NWE Allocated from 2014 to cover LC Expense <sup>(c)</sup>			-	11,272	-	-	11,272
NWE Allocated from 2013 to cover LC Expense <sup>(c)</sup>			(6,839)	-	-	-	(6,839)
Large Customer Summary			2,191,636	695,783	3,087	-	2,890,506
<b>Unallocated</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Totals</b>	<b>9,543,001</b>	<b>(0)</b>	<b>6,700,225</b>	<b>2,180,014</b>	<b>508,507</b>	<b>154,254</b>	<b>9,543,001</b>
<b>2014 USB Revenues less Expenses and Contractual Commitments</b>							<b>-</b>

<sup>(a)</sup> Allocations have been adjusted between Market Transformation and Local Conservation; and, between Research and Development and Renewable Generation consistent with past practice.

<sup>(b)</sup> As a result of DPHHS weatherization monitoring findings \$17.62 from the 2012 contract and \$1,239.77 from the 2013 contract has been returned to NWE.

<sup>(c)</sup> The 2014 Large Customer Admin Costs of \$12,621 less the interest income of \$783 exceeded the amount of unclaimed 2014 Large Customer funds of \$4,999. NWE has committed unclaimed 2013 Large Customer funds in the amount of \$6,839 to cover the deficit.

**PROJECTS COMPLETED IN 2016 WITH 2014 FUNDS**

USB Category	Projects Completed in 2016 with 2014 Funds			MW
	aMW	MWH	2014 USB \$	
Local Conservation	-	-	-	-
Market Transformation	-	-	-	-
Renewables	0.020	179	0.1365	0.1365
Research & Development	NA	NA	NA	NA
Low Income	-	-	-	-
Large Customer	NA	NA	NA	NA
	<b>0.020</b>	<b>179</b>		<b>0.1365</b>

Program Participation Summary			
USB Category / Program Segment	Quantity	Units	
<b>Conservation</b>			
Residential Onsite Audits	-	homes	
Residential Mail out Audits	-	homes	
Business Appraisals	-	businesses	
Business Partners/Irrigation	-	projects	
Business Partners/Small Choice	-	projects	
<b>Market Transformation</b>			
Commercial Lighting	-	projects	
NWE Building Operator Certification	-	people	
Motor Training	-	people	
<b>Renewables</b>			
Generation / Education	17	projects	
<b>Research &amp; Development</b>			
Renewable Energy Seminars/Workshops	955	attendees	
<b>Low-Income</b>			
Bill Assistance	-	households	
Free Weatherization	-	homes	
Energy Share	-	households	

**TOTAL OF PROJECTS COMPLETED WITH 2014 FUNDS**

USB Category	Total Projects Completed with 2014 Funds			MW
	aMW	MWH	2014 USB \$	
Local Conservation	0.227	1,987	0.398	0.398
Market Transformation	0.005	42	0.004	0.004
Renewables	0.087	760	0.579	0.579
Research & Development	NA	NA	NA	NA
Low Income	0.026	225	0.112	0.112
Large Customer	NA	NA	NA	NA
	<b>0.344</b>	<b>3,014</b>		<b>1.093</b>

Program Participation Summary			
USB Category / Program Segment	Quantity	Units	
<b>Conservation</b>			
Residential Onsite Audits	2,611	homes	
Residential Mail out Audits	1,687	homes	
Business Appraisals	213	businesses	
Business Partners/Irrigation	37	projects	
Business Partners/Small Choice	-	projects	
<b>Market Transformation</b>			
Commercial Lighting	1	projects	
NWE Building Operator Certification	-	people	
Motor Training	48	people	
Market Transformation Training	40	people	
<b>Renewables</b>			
Generation / Education	63	projects	
<b>Research &amp; Development</b>			
Renewable Energy Seminars/Workshops	1,824	attendees	
<b>Low-Income</b>			
Bill Assistance	12,569	households	
Free Weatherization	352	homes	
Energy Share	1,429	households	

# Addendum **2013 Report**

Universal System  
Benefits Activities  
**2016 Annual Report**

**ADDENDUM  
to the  
2013 Report**



The 2013 NorthWestern Energy USBC revenues totaled \$9,485,951. Of this, \$6,938,627 was spent on projects completed in 2013, \$2,076,825 was spent on projects completed in 2014, \$369,513 was spent on projects completed in 2015, and the remaining balance of \$100,987 of projects completed in 2016.

The results are included in Appendix 2 of this addendum.

Updated results are provided in the 2013 Addendum in Appendices 2 and 3 (p. 2013-2 and p. 2013-3).

	Revenue Allocation		Spent in 2013	Spent in 2014	Spent in 2015	Spent in 2016	Allocation & Expenses
	per Order 6679e	Reallocation <sup>(a)</sup>					
<b>Local Conservation</b>	<b>1,119,675</b>	<b>118,435</b>	<b>867,055</b>	<b>371,055</b>	<b>-</b>	<b>-</b>	<b>1,238,110</b>
E+ Residential Audit/Sm. Comm Audit			650,787	371,055	-	-	1,021,842
E+ Business Partners / Irrigation Projects			122,404	-	-	-	122,404
Promotion			60,989	-	-	-	60,989
Labor			32,461	-	-	-	32,461
Admin. Non-labor			569	-	-	-	569
Interest Income			(154)	-	-	-	(154)
Local Conservation Summary			867,055	371,055	-	-	1,238,110
<b>Market Transformation</b>	<b>714,973</b>	<b>(471,117)</b>	<b>169,438</b>	<b>36,493</b>	<b>37,925</b>	<b>-</b>	<b>243,856</b>
E+ Commercial Lighting			-	-	-	-	-
Motor Management Training			6,701	13,299	-	-	20,000
Energy Star Homes			47,215	-	-	-	47,215
Building Operator Certification			38,882	23,194	-	-	62,077
Commercial Industrial Training & Conference			36,170	-	-	-	36,170
Promotion			17,295	-	-	-	17,295
Labor			19,131	-	-	-	19,131
Admin. Non-labor			4,143	-	-	-	4,143
Interest Income			(99)	-	-	-	(99)
Allocated to Free Weatherization			-	-	26,548	-	26,548
Allocated to Energy Share			-	-	11,377	-	11,377
Market Transformation Summary			169,438	36,493	37,925	-	243,856
<b>Renewable Resources</b>	<b>1,280,518</b>	<b>(300,984)</b>	<b>146,362</b>	<b>589,505</b>	<b>165,334</b>	<b>78,333</b>	<b>979,534</b>
Generation/Education			103,012	589,505	165,334	78,333	936,184
Green Power Product			(18,309)	-	-	-	(18,309)
Promotion			8,197	-	-	-	8,197
Labor			51,782	-	-	-	51,782
Admin. Non-labor			1,857	-	-	-	1,857
Interest Income			(177)	-	-	-	(177)
Renewable Resources Summary			146,362	589,505	165,334	78,333	979,534
<b>Research &amp; Development</b>	<b>295,744</b>	<b>8,670</b>	<b>50,114</b>	<b>106,661</b>	<b>124,984</b>	<b>22,655</b>	<b>304,414</b>
R&D/ Infrastructure			39,103	106,661	124,984	22,655	293,403
Promotion			1,918	-	-	-	1,918
Labor			9,062	-	-	-	9,062
Admin. Non-labor			71	-	-	-	71
Interest Income			(41)	-	-	-	(41)
Research & Development Summary			50,114	106,661	124,984	22,655	304,414
<b>Low Income</b>	<b>3,234,502</b>	<b>644,997</b>	<b>3,288,286</b>	<b>591,214</b>	<b>-</b>	<b>-</b>	<b>3,879,499</b>
Bill Assistance			2,480,722	-	-	-	2,480,722
Free Weatherization			518,000	413,850	-	-	931,850
Elec Wx Incentives			40,289	-	-	-	40,289
Fuel Switch Analyses			4,400	-	-	-	4,400
Energy Share			239,000	177,364	-	-	416,364
Promotion			6,576	-	-	-	6,576
Labor			40,009	-	-	-	40,009
Admin. Non-labor			883	-	-	-	883
Interest Income			(446)	-	-	-	(446)
Allocated from 2011 LC to Low Income <sup>(b)</sup>			(34,568)	-	-	-	(34,568)
Allocated from 2009 Mkt Trans to Low Income <sup>(c)</sup>			(6,580)	-	-	-	(6,580)
Low Income Summary			3,288,286	591,214	-	-	3,879,499
<b>Large Customer</b>	<b>2,840,538</b>	<b>(0)</b>	<b>2,417,372</b>	<b>381,897</b>	<b>41,269</b>	<b>-</b>	<b>2,840,538</b>
Self-Directed Energy Reduction			2,297,516	310,058	29,910	-	2,637,484
Self-Directed to Low Income			117,775	65,000	-	-	182,775
Labor			14,339	-	-	-	14,339
Admin. Non-labor			-	-	-	-	-
Interest Income			(392)	-	-	-	(392)
NWE Reallocated LC Funds from 2012 <sup>(d)</sup>			(11,866)	-	-	-	(11,866)
NWE Reallocated to Free Weatherization			-	-	7,951	-	7,951
NWE Reallocated to Energy Share			-	-	3,408	-	3,408
NWE Allocated from 2013 to cover LC Expense			-	6,839	-	-	6,839
Large Customer Summary			2,417,372	381,897	41,269	-	2,840,538
<b>Unallocated</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Totals</b>	<b>9,485,951</b>	<b>0</b>	<b>6,938,627</b>	<b>2,076,825</b>	<b>369,513</b>	<b>100,987</b>	<b>9,485,951</b>
<b>2013 USB Revenues less Expenses and Contractual Commitments</b>							<b>-</b>

<sup>(a)</sup> Allocations have been adjusted between Market Transformation and Local Conservation; and, between Research and Development and Renewable Generation consistent with past practice.

<sup>(b)</sup> The reallocation of unspent 2013 Large Customer funds to Low Income is consistent with past practice.

<sup>(c)</sup> A 2009 Market Transformation project to which funds had been previously been committed completed in 2013 for \$6,580 less than anticipated and, consistent with past practice, these funds were reallocated to 2013 low income activities.

<sup>(d)</sup> The 2013 Large Customer Admin Costs of \$14,399 less the interest income of \$392 exceeded the amount of unclaimed 2013 Large Customer funds of \$2,081. NWE has committed unclaimed 2012 Large Customer funds in the amount of \$11,866 to cover the deficit.

**PROJECTS COMPLETED IN 2016 WITH 2013 FUNDS**

USB Category	Projects Completed in 2016 with 2013 USB \$		
	aMW	MWH	MW
Local Conservation	-	-	-
Market Transformation	-	-	-
Renewables	0.013	114	0.0869
Research & Development	NA	NA	NA
Low Income	-	-	-
Large Customer	NA	NA	NA
	<b>0.013</b>	<b>114</b>	<b>0.0869</b>

Program Participation Summary			
USB Category / Program Segment	Quantity	Units	
<b>Conservation</b>			
Residential Onsite Audits	-	homes	
Residential Mail out Audits	-	homes	
Business Appraisals	-	businesses	
Business Partners/Irrigation	-	projects	
Business Partners/Small Choice	-	projects	
<b>Market Transformation</b>			
Commercial Lighting	-	projects	
NWE Building Operator Certification	-	people	
Motor Training	-	people	
<b>Renewables</b>			
Generation / Education	5	projects	
<b>Research &amp; Development</b>			
Renewable Energy Seminars/Workshops	180	attendees	
<b>Low-Income</b>			
Bill Assistance	-	households	
Free Weatherization	-	homes	
Energy Share	-	households	

**TOTAL OF PROJECTS COMPLETED WITH 2013 FUNDS**

USB Category	Total Projects Completed with 2013 USB \$		
	aMW	MWH	MW
Local Conservation	0.210	1,838	0.355
Market Transformation	0.282	2,471	-
Renewables	0.090	788	0.600
Research & Development	NA	NA	NA
Low Income	0.047	410	0.139
Large Customer	NA	NA	NA
	<b>0.629</b>	<b>5,507</b>	<b>1.094</b>

Program Participation Summary			
USB Category / Program Segment	Quantity	Units	
<b>Conservation</b>			
Residential Onsite Audits	3,044	homes	
Residential Mail out Audits	3,453	homes	
Business Appraisals	307	businesses	
Business Partners/Irrigation	21	projects	
Business Partners/Small Choice	5	projects	
<b>Market Transformation</b>			
Commercial Lighting	-	projects	
NWE Building Operator Certification	46	people	
Motor Training	80	people	
<b>Renewables</b>			
Generation / Education	77	projects	
<b>Research &amp; Development</b>			
Renewable Energy Seminars/Workshops	1,384	attendees	
<b>Low-Income</b>			
Bill Assistance	12,389	households	
Free Weatherization	496	homes	
Energy Share	1,381	households	