Universal System Benefits Activities 2017 Annual Report

March 2018





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 \$173 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 \$9,838,601 was collected from NorthWestern Energy's electric distribution customers in 2017. This is about \$391,000 more than 2016 revenues with Large Customer revenues up by more than \$116,500 and non-Large Customer revenues up by about \$274,500 when compared to 2016 revenues.

The 2017 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 Renewable Generation categories.

The portfolio of low income, conservation, and renewable generation programs in 2017 is similar to 2016.

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 2017 electric USB revenues, \$4,919,301, 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 \$50,594 of their 2017

electric USB funds to Low Income activities, bringing the total of 2017 electric USB funds directed to Low Income to \$ 4,969,895 or 50.51% of the 2017 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 2017 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 2017 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 2017 electric USB funds by category and activity, and a summary of the energy and demand savings and new renewable resources resulting from the 2017 allocations. The report also includes updates on previous years' activities, and a summary by public purpose category of electric USB funding from 1999-2017.

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 \$9,838,601 in 2017. 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 2017.

General Description	Tariffed Customer Class	Rate/kWh	Percent
Residential	Residential	\$0.001334	34%
Commercial/Small Industrial	GS-1 & GS-2 under 1000 KW	\$0.001143	32%
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 57 customers and their 523 accounts, make up \$3.01 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 2017, the net gain in interest to USB was \$2,167 of which \$1,474 was credited to the electric USB categories on a pro rata basis and the balance was credited to natural gas USB activities.

UNIVERSAL SYSTEM BENEFITS EXPENDITURES

All electric USB funds collected from NorthWestern Energy customers in 2017 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 2017 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 2017 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 2017 and has financial commitments to implement additional activities/projects for completion in 2018. These programs and activities are described in this report. The breakdown between qualifying expenditures in the current year and financial commitments for completion in 2018 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 2014, 2015, and 2016 Reports. None of the projects to which 2017 funds have been committed are expected at this time to extend beyond 2018.

UNIVERSAL SYSTEM BENEFITS RESULTS

From 1999 through 2017, NorthWestern Energy has delivered USB benefits to various customer classes and across all public purpose categories. General descriptions of the activities or programs for 2017, along with the funding total for each category, follow.

Large Customers-- \$3,009,528

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 the 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 2017, \$3,009,528 was collected from 57 Large Customers to meet their 2017 obligations. All but two of these customers self-directed all of their 2017 USB funds. Large Customers self-directed \$2,177,033 of 2017 funds toward energy reduction projects within their facilities, and have carried over \$780,474 for additional projects in 2018. Large Customers self-directed \$50,594 to Low Income activities in 2017.

The unclaimed 2017 Large Customer funds in the amount of \$1,428 and the 2017 USB account interest amount of \$451 were not sufficient to cover the NorthWestern Energy administrative costs for 2017 Large Customers of \$13,763. The shortfall was covered through unclaimed 2016 Large Customer funds in the amount of \$11,884. 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 selfdirected USB funds in the previous year. The list of the 55 Large Customers on NorthWestern's system that self-directed funds follows.

Listing of Large Customers Self-Directing Funds in 2017

AMERICAN CHEMET	OLDCASTLE MATERIALS CEMENT HOLDINGS
ASH GROVE CEMENT	PASTA MONTANA
ASPEN AIR	PHILLIPS66 PIPELINE (YELLOWSTINE PIPELINE & PHILLIPS 66 CARRIER)
ATK TACTICAL SYSTEMS	PHILLIPS66 REFINERY
BARRETTS MINERALS	PROJECT SPOKANE LLC
BENEFIS HEALTH CARE	R Y TIMBER
BILLINGS CLINIC	REC SILICON
CALUMET MONTANA REFINING, LLC	ROCKY MOUNTAIN POWER
CHS	ROSEBURG FOREST PRODUCTS
CITY OF BILLINGS	SAINT JAMES HOSPITAL
CITY OF GREAT FALLS	SAINT PATRICK HOSPITAL
COLSTRIP PARTNERSHIP	SAINT VINCENT HEALTHCARE
COMMUNITY MEDICAL CENTER	STILLWATER MINING COMPANY
EXPRESS PIPELINE LLC	SUN MOUNTAIN LUMBER
EXXONMOBIL	TALEN MONTANA, LLC
GENERAL MILLS	THOMPSON RIVER LUMBER
GOLDEN SUNLIGHT MINES, INC. (BARRICK)	TRICON TIMBER (IDAHO FOREST PRODUCTS IN 2018)
GRAIN CRAFT (FORMERLY CEREAL FOODS)	UNITED MATERIALS INCORPORATED
GRAYMONT WESTERN US INC.	UNITED PROPERTIES, INC.
IMERYS TALC AMERICA, INC.	UNIVERSITY OF MONTANA
JUDITH GAP ENERGY LLC	US AIR FORCE
MALTEUROP NORTH AMERICA, INC.	US DEPT VETERANS AFFAIRS
METRA PARK	US PUBLIC HEALTH SERVICE (NATIONAL INSTITUTE OF HEALTH)
MONTANA DEPARTMENT OF CORRECTIONS	WESTERN ENERGY
MONTANA PRECISION PRODUCTS LLC (SEACAST)	WESTERN SUGAR COOPERATIVE
MONTANA RESOURCES	WESTMORELAND RESOURCES INC.
MONTANA STATE UNIVERSITY - BILLINGS	YELLOWSTONE DEVELOPMENT (YELLOWSTONE CLUB)
MONTANA STATE UNIVERSITY - BOZEMAN	

Low Income Activities -- \$4,919,301

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 \$4,919,301 in 2017 electric USB funds to Low Income activities, or 50% of electric USB revenues. Large Customers reported self-directing an additional \$50,594 to Low Income activities bringing the total 2017 funds committed to Low Income to \$4,969,895 which is slightly more than 50% of the total funds collected.

Consistent with historic practice, unspent 2016 Large Customer funds have been directed first to covering the 2017 Large Customer administrative costs and the balance has been directed to the 2016 Low Income category as noted in Appendix 2 of the Addendum to the 2016 Report.

Appendix 4 to the 2017 report provides a summary of NorthWestern Energy's Electric USB allocations for 1999-2017 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 Low Income Energy Assistance Program (LIEAP) eligibility requirements receive bill assistance in the form of a discount on their utility bill. 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 12,900 low income households were served in 2017 with electric USB funds. The financial impact of electricity costs on low income households was reduced through bill assistance, weatherization, and emergency energy assistance.

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 2017 was slightly greater than the 2016 participation level. The funding of the electric Low Income discount totaled \$2,415,021 in 2017 for the 11,337 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 2017 have been noted in previous reports. Increased funding to the Low Income category with MPSC Order No. 7458 increased funding of Free Weatherization Program. 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 2017 Free Weatherization Program pooled unspent 2014, 2015, and 2016 electric USB funds, along with 2017 electric USB funds and 2017 natural gas funds for a total of \$3,418,271. The HRCs performed low income weatherization work for 473 low income customers in 2017. An additional \$444,796 of unspent 2017 electric funds and \$1,753 of unspent 2016 large customer funds has been committed to low income weatherization to be completed in 2018.

The Free Weatherization program includes a comprehensive energy audit, installation of air-sealing, hot water conservation, insulation measures and compact fluorescent light or LED bulbs, and energy related health and safety improvements such as heating equipment tune-ups, repairs and replacement. 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.

- "Weatherization Program is great for elders or all who qualify for the program. Thank you Montana and the men and ladies who do the work."
- "Keep this program and the guys are great. I appreciate everything done for me. Thank you."
- "Wonderful crew to work with. They were efficient, courteous, knowledgeable, and thorough. I am very pleased with the program. Grateful. Thank you!"
- "I am very happy with the quality of work of what was done and the workmanship. I am grateful and not afraid of winter. Thank you! Thank you! Thank you!"

Energy Share

Energy Share of Montana offers assistance to those facing energy 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 Addendums to the 2014 and 2016 reports, previously unspent Large Customer funds have been reallocated to Energy Share resulting in a total of \$808,936 being directed to Energy Share in 2017. An additional \$149,956 of unspent 2017 electric funds and \$751 of unspent 2016 large customer funds have been committed to Energy Share for payment in 2018.

Local Conservation Activities-- \$ 758,514

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 <u>E+ Audit for the Home</u> 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 2016 and 2017 electric USB funds, along with 2017 natural gas funds allowed for the completion of 2,157 on-site residential audits in 2017.

NorthWestern Energy *electric baseload-only customers (no space heat or water heat fuels delivered by NorthWestern Energy)* are offered a separate audit service. The <u>E+</u> <u>Energy Survey</u> 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 2,836 residential electric customers participated in the E+ Energy Survey program in 2017.

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

- "These guys are awesome! Thorough inspection of house and lots of good advice. Plus, they found a problem with our boiler that we are now having repaired. "
- "They were very polite and took as much time as needed to check everything; even going up to the attic. Am very pleased with this kind of service and helpful suggestions."
- "It's a great help to get a handle on all the little things a homeowner can do to save some money and be more energy effective. Thanx!"
- "They were VERY thorough and PATIENT in explain problems, facts and knowledge—I learned a tremendous amount from both of them."

<u>The E+ Energy Appraisal Program for Businesses</u> 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 2017, approximately 125 commercial facilities were evaluated through this program offering with electric USB funding from 2016 and 2017.

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 2017, seven irrigation efficiency improvement projects were funded and completed with 2017 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 2017.

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

Market Transformation – \$268,707

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 2017.

ENERGY STAR® and New Homes

USB funds provide outreach for the ENERGY STAR homes program including builder and verifier training and the promotion of high energy efficiency in new home construction. Additionally, USB funds were used to provide training and develop educational information related to Montana's adoption of the 2012 Energy Code for builders, code officials, trade allies, and the general public.

Motor Management and 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. Motor management training for electricians and facility operators were held in multiple cities in 2017. Building Operator Certification classes held in 2017 specifically targeted public schools, government facilities, and non-profit hospitals. These activities help support other electric energy efficiency programs of NorthWestern Energy.

Regional Market Transformation

NorthWestern Energy has directed 2017 Market Transformation funds to regional collaborative and training efforts. Technical training targeting commercial and industrial customers and trade allies is included in these activities.

Renewable Resources, <u>and</u> Research and Development--\$882,550

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 2017 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. 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. 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.

With USB funding a portion of the projects, 14 solar PV projects completed in 2017. The majority of these projects were funded with 2015 and 2016 funds. Projects completed in 2017 were installed on schools, public buildings, non-profit facilities, a commercial building, and low income residences.

Projects completed in 2017 with funds from previous years are noted in the Addendums to the 2014, 2015, and 2016 reports.

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

USB Renewable Projects 1999-2017					
Facility Type	#	KW			
Commercial Projects	68	639.57			
Fire Stations	41	108.06			
Irrigation Projects	6	103.52			
Low Income	61	340.25			
Non-Profit Projects	65	366.96			
Private Residences	831	2,653.96			
Schools	93	557.00			
Other Public Buildings	25	408.66			
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 2017, 42 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 Qualified Installer list 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 sponsored 81 training sessions throughout the state in 2017. 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 2018. 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 2017, 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.

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 energy assistance.

NorthWestern Energy collects the natural gas USBC from its customers and implements Low Income bill assistance, emergency energy assistance, 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 energy 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 2014, 2015 and 2016 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 <u>www.NorthWesternEnergy.com/Eplus</u>.

For further information regarding this report, please contact:

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Appendices 1-4

Universal System Benefits Activities 2017 Annual Report

NorthWestern [*]	E Efficiency
Energy	Plus

	USBC kWh (Load)	USBC Revenue By Class	% of USB Revenue By Class
Residential			
Residential	2,525,165,315	\$ 3,366,962	34%
General Service			
GS-1/GS-2 < 1000 kW	2,741,636,068	\$ 3,133,633	32%
Irrigation	106,624,928	\$ 121,189	1%
Lighting	60,865,844	\$ 207,289	2%
Total Non-Large Customer	5,434,292,154	\$ 6,829,073	69%
Large Customer			
GS-1/GS-2 > 1000 kW			
and Special Contracts	3,343,231,954	\$ 3,009,528	31%
Total USBC	8,777,524,108	\$ 9,838,601	100%

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.

NorthWestern Energy Efficiency Plus

Appendix 2 2017 Electric USB Program Expenditures and Contractual Commitments

	Revenue A	llocation		Contracted -	Allocation &	
	per Order 7458	Reallocation ^(a)	Spent in 2017	Complete in 2018	Expenses	
Local Conservation	626,907	131,607	551,357	207,157	758,514	
E+ Residential Audit/Sm. Comm Audit			422,986	207,157	630,143	
E+ Business Partners / Irrigation Projects			20,167	-	20,167	
Promotion			79,129	-	79,129	
Labor			28,031	-	28,031	
Admin. Non-labor			1,138	-	1,138	
Interest Income			(94)	-	(94	
Local Conservation Summary			551,357	207,157	758,514	
Market Transformation	400,314	(131,607)	258,707	10,000	268,707	
E+ Commercial Lighting			-	-	-	
Motor Management Training			17,067	-	17,067	
Energy Star Homes			123,307	-	123,307	
Building Operator Certification			37,359	10,000	47,359	
Commercial Industrial Training & Conference			40,455	-	40,455	
Promotion			14,683	-	14,683	
Labor			18,475	-	18,475	
Admin. Non-labor Interest Income			7,421 (60)	-	7,421	
Market Transformation Summary			(60) 258,707	- 10,000	(60)	
Renewable Resources	716,963	27,027	35,417	708,574	743,991	
Generation/Education	710,505	21,021	-	708,574	708,574	
Green Power Product			(12,728)	-	(12,728)	
Promotion			2,341	-	2,341	
Labor			45,302	-	45,302	
Admin. Non-labor			609	-	609	
Interest Income			(107)	-	(107)	
Renewable Resources Summary		-	35,417	708,574	743,991	
Research & Development	165,587	(27,027)	16,919	121,641	138,559	
R&D/ Infrastructure		• • •	1,618	121,641	123,259	
Battery Storage			1,034	-	1,034	
Promotion			3,375	-	3,375	
Labor			10,671	-	10,671	
Admin. Non-labor			245	-	245	
Interest Income			(25)	-	(25)	
Research & Development Summary			16,919	121,641	138,559	
Low Income	4,919,301	0	4,324,549	594,752	4,919,301	
Bill Assistance			2,415,021	-	2,415,021	
Free Weatherization			1,555,100	444,796	1,999,896	
Elec Wx Incentives			19,047	-	19,047	
Fuel Switch Analyses			3,500	-	3,500	
Energy Share			289,000	149,956	438,956	
Promotion Labor			9,702	-	9,702	
Labor Admin. Non-labor			30,836 3,080	-	30,836 3,080	
Interest Income			(737)	-	(737)	
Low Income Summary			4,324,549	594,752	4,919,302	
Large Customer	3,009,528	(0)	2,229,054	780,474	3,009,528	
Self-Directed Energy Reduction	0,000,020	(0)	2,177,033	780,474	2,957,507	
Self-Directed to Low Income			50,594	-	50,594	
Labor			13,763	_	13,763	
Interest Income			(451)	-	(451)	
NWE Allocated from 2016 to cover LC Expense (b)			(11,884)	-	(11,884)	
Large Customer Summary			2,229,054	780,474	3,009,528	
Unallocated	-	-	-	-	-	
	0.000.004	(0)	7 440 004	2 422 507	0.000.004	
Totals	9,838,601	(0)	7,416,004	2,422,597	9,838,601	

(a) Allocations have been adjusted between Market Transformation and Local Conservation consistent with past practice. (b) The 2017 Large Customer Admin Costs of \$13,763 less the interest income of \$451 exceeded the amount of unclaimed 2017 Large Customer funds of \$1,428. NWE has committed unclaimed 2016 Large Customer funds in the amount of \$13,312 to cover the deficit.



2017 USB FUNDING AND EXPENDITURE SUMMARY

Appendix 3 2017 Electric USB Funding Summary Savings Estimates and Participation Summary

	2	location of 017 funds ed on Order	Percentage by	Re	allocation of	Percentage by	location w/Lrg Cust	Percentage by	tal Electric SB Funds	U	17 Electric SB Funds ntracted to
USB Category		7458	Category	-	2017 funds	Category	LI ^(a)	Category	ent in 2017		end in 2018
Local Conservation	\$	626,907	6%	\$	758,514	8%	\$ 758,514	8%	\$ 551,357	\$	207,157
Market Transformation	\$	400,314	4%	\$	268,707	3%	\$ 268,707	3%	\$ 258,707	\$	10,000
Renewables	\$	716,963	7%	\$	743,991	8%	\$ 743,991	8%	\$ 35,417	\$	708,574
Research & Development	\$	165,587	2%	\$	138,559	1%	\$ 138,559	1%	\$ 16,919	\$	121,641
Low Income	\$	4,919,301	50%	\$	4,919,301	50%	\$ 4,969,895	51%	\$ 4,375,143	\$	594,752
Large Customer	\$	3,009,528	31%	\$	3,009,528	31%	\$ 2,958,934	30%	\$ 2,178,460	\$	780,474
	\$	9,838,601	100%	\$	9,838,601	100%	\$ 9,838,601	100%	\$ 7,416,004	\$	2,422,597

2017 LOW INCOME FUNDING SUMMARY

		-	
Low	Income	Category	

Low moome outegory	
Bill Assistance	\$ 2,415,021
Free Weatherization	\$ 1,555,100
Elec Wx Incentives	\$ 19,047
Fuel Switch Analysis	\$ 3,500
Energy Share	\$ 289,000
NWE Promotion	\$ 9,702
NWE Labor	\$ 30,836
NWE Admin. Non-labor	\$ 3,080
USB Interest & Svc Chg	\$ (737)
Self-Directed Large Customer	\$ 50,594
Subtotal:	\$ 4,375,143
Low Income share of 2017 Electric USB revenues :	44.5%

2017 ENERGY SAVINGS & RENEWABLE RESOURCES ESTIMATES

	Savings & Resources acquired in 2017 w/ 2017 \$				
	aMW	MWH	MW		
Local Conservation	0.11	1,000	0.169		
Market Transformation	0.05	458	-		
Renewables	-	-	-		
Research & Development	NA	NA	NA		
Low Income	0.04	335	0.026		
Large Customer ^(b)	NA	NA	NA		
	0.20	1,792	0.195		

Projected Savings & Resources to acquire in 2018 w/ 2017 \$ (c)

	aMW	MWH	MW
Local Conservation	0.01	92	0.018
Market Transformation	0.01	123	-
Renewables	0.05	404	0.307
Research & Development	NA	NA	NA
Low Income	0.01	51	0.004
Large Customer (b)	NA	NA	NA
	0.08	669	0.329
-			
Total Savings & Resources	0.281	2,461	0.525

2017 ELECTRIC USB PARTICIPATION SUMMARY

Electric USB Activity by Category	Quantity	Units
Conservation		
Residential Onsite Audits	1,929	homes
Residential Mail out Audits	2,536	homes
Business Appraisals	112	businesses
Business Partners / Irrigation	7	projects
Business Partners / Small Choice	-	projects
Market Transformation		
Commercial Lighting	-	projects
NWE Building Operator Certification	17	people
Motor Training	104	people
Market Transformation Training	35	people
Renewables		
Generation / Education	-	projects
Research & Development		
Renewable Energy Seminars/Workshops	-	attendees
Low-Income		
Bill Assistance	11,337	households
Free Weatherization	408	homes
Energy Share	1,594	households

(a) Large Customers may self-direct their USB dollars to energy saving and renewable activities in their own facilities, or to Low Income activities. In 2017 with 2017 funds, Large Customers self-directed a total of \$50,594 to Low-Income.

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

(c) Projected Savings & Resources are based on contracts that were in place at the end of 2017. Actual results will be reported in 2018.



Annual Electric USB Allocation

Revenue by Category

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 (a)

	% by Category	\$ by Category
Local Conservation	7%	623,468
Market Transformation	4%	398,118
Renewables	8%	713,030
Research & Development	2%	164,679
Low-Income	50%	4,916,169
Large Customers	29%	3,016,873
	100%	9,832,338

Historic Allocation of Electric USB Funds (b)

					U	SB Categories				
	Total Electric	Large		Supplemental	Total		Market		Research	
Year	USB Funds	Customers	Low Income (c)	Low Income (d)	Low Income	Conservation	Transformation	Renewables	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	2,897,568	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	-
2017	9,838,601	3,009,528	4,919,301	-	4,919,301	758,514	268,707	743,991	138,559	
	172,791,349	54,104,724	58,937,366	2,336,999	61,274,365	25,730,626	9,216,358	17,732,880	3,975,842	756,549
Allocation as % of	100%	31%			35%	15%	5%	10%	2%	0%

Allocation as % of Revenues, excluding Large Customer	100%	52%	22%	8%	15%	3%	1%
Revenues							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 North/Western 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 2017.
- (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 2016 Report

Universal System Benefits Activities 2017 Annual Report

ADDENDUM to the 2016 Report

NorthWestern[®] Energy | Efficiency Plus

The 2016 NorthWestern USBC revenues totaled \$9,447,558. Of this, \$7,129,086 was spent on projects completed in 2016, and \$1,956,385 was spent on projects completed in 2017, leaving a balance of \$362,088 for projects to complete in 2018.

The projects associated with \$1,956,385 of 2016 USB funds, including \$795,309 of Large Customer self-directed activities were completed in 2017. Included in the 2017 expenditures, NorthWestern Energy reallocated \$11,884 of unspent Large Customer 2016 funds to cover a portion of the deficit in the 2017 Large Customer category consistent with historic practice. The results are included in Appendix 2 of this addendum.

Additional unspent 2016 Large Customer funds identified were reallocated to Low Income activities with \$1,753 directed to Free Weatherization and \$751 directed to Energy Share to be spent in 2018, consistent with historic practice.

NorthWestern Energy requested and was granted extensions from the Department of Revenue as allowed per ARM 49.29.111 for on and Research and Development projects totaling \$359,584 for completion in 2018.

Updated results are provided in the 2016 Addendum in Appendices 2 and 3 (p. 2016-2 and p. 2016-3).



E Efficiency Plus

Appendix 2 2016 Electric USB Program Expenditures and Contractual Commitments

	Revenue A	llocation			Contracted -	Allocation &
	per Order 7458	Reallocation ^(a)	Spent in 2016	Spent in 2017	Complete in 2018	Expenses
Local Conservation	600,969	116,827	561,247	156,549	-	717,796
E+ Residential Audit/Sm. Comm Audit		- , -	361,703	156,549	-	518,25
E+ Business Partners / Irrigation Projects			83,945	-	-	83,94
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
Market Transformation	383,751	(116,827)	256,924	10,000	-	266,924
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
Renewable Resources	574,269	0	45,928	284,575	243,766	574,269
Generation/Education			-	284,575	243,766	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	284,575	243,766	574,269
Research & Development	271,766	0	49,335	106,614	115.818	271,766
R&D/ Infrastructure		-	29,200	106,614	115,818	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	106,614	115,818	271,766
Low Income	4,723,779	0	4,132,324	591,454	-	4,723,779
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
Large Customer	2,893,024	0	2,083,328	807,193	2,504	2,893,025
Self-Directed Energy Reduction	2,000,024		2,003,320	555,353	-	2,567,860
Self-Directed to Low Income			67,000	104,247	-	171,247
Self-Directed to Edw monte Self-Directed to Renewable Energy			07,000	135,709	-	135,709
Labor			12,931	-	-	12,931
Interest Income			(346)		-	(346
NWE Reallocated to Free Weatherization			-	-	1,753	1,753
NWE Reallocated to Energy Share			-	-	751	751
NWE Allocated from 2015 to cover LC Expense (b)			(8,764)	-	-	(8,764
NWE Allocated from 2016 to cover LC Expense (b)			-	11,884	-	11,884
Large Customer Summary			2,083,328	807,193	2,504	2,893,025
Unallocated	-	-	_	-	_	-
Totals	9,447,558	0	7,129,086	1,956,385	362,088	9,447,558

^(a) Allocations have been adjusted between Market Transformation and Local Conservation consistent with past practice.

^(b) The 2016 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.



PROJECTS COMPLETED IN 2017 WITH 2016 FUNDS

Energy Savings &	Renewable	Resou	rce Estima	ates	
1	Project	s Comp	leted in 20	017 wi	th 2016 USB \$
USB Category		aMW		MWH	MM
Local Conservation		0.01		94	0.020
Market Transformation		0.01		123	-
Renewables		0.02		175	0.133
Research & Development	NA		NA		NA
Low Income		0.01		49	0.004
Large Customer	NA		NA		NA
l		0.05		441	0.157
	Participatio	on Sumr	•		
USB Category / Program Segment			Quanti	ty	Units
Conservation Residential Onsite Audits				000	
Residential Onsite Audits				-	homes
Business Appraisals					homes businesses
Business Partners/Irrigation				- 13	projects
Business Partners/Small Choice				-	projects
Market Transformation					
Commercial Lighting				-	projects
NWE Building Operator Certification				5	people
Motor Training				-	people
Renewables					
Generation / Education				7	projects
Research & Development					
Renewable Energy Seminars/Workshops	;			1,090	attendees
Low-Income					
Bill Assistance				-	households
Free Weatherization				60	homes
Energy Share				-	households
Energy Shale				-	nousenoias

TOTAL OF PROJECTS COMPLETED WITH 2016 FUNDS

Energy Savings & Re	newable	Resou	rce Estimates	
F	Total F	rojects	Completed wit	h 2016 USB \$
USB Category		aMW	MWH	MW
Local Conservation		0.15	1,347	0.317
Market Transformation		0.09	774	-
Renewables		0.02	175	0.133
Research & Development	NA		NA	NA
Low Income		0.03	248	0.019
Large Customer	NA		NA	NA
		0.29	2,544	0.469
Program Pa	rticipatio	n Sumi	mary	
USB Category / Program Segment			Quantity	Units
Conservation				
Residential Onsite Audits			2,104	homes
Residential Mail out Audits			2,952	
Business Appraisals				businesses
Business Partners/Irrigation			18	projects
Business Partners/Small Choice			-	projects
Market Transformation				
Commercial Lighting			-	projects
NWE Building Operator Certification			26	people
Motor Training			-	people
Market Transformation Training			38	people
Renewables				
Generation / Education			19	projects
Research & Development				
Renewable Energy Seminars/Workshops			1,390	attendees
Low-Income				
Bill Assistance			11,220	households
Free Weatherization			436	homes
Energy Share			1,612	households

Addendum 2015 Report

Universal System Benefits Activities 2017 Annual Report

ADDENDUM to the 2015 Report

NorthWestern[®] Energy | Efficiency Plus

The 2015 NorthWestern USBC revenues totaled \$9,531,040. Of this, \$5,980,704 was spent on projects completed in 2015, \$3,173,729 was spent on projects completed in 2016, and \$309,708 was spent on projects completed in 2017, leaving a balance of \$66,899 for projects to complete in 2018.

Included in the 2017 results, and consistent with historic practice, unspent 2015 Large Customer funds identified were reallocated to Low Income activities. Of the \$3,635 reallocated funds, \$1,090 was directed to Energy Share and \$2,545 was directed to Free Weatherization. Renewable projects and Research and Development activities account for the \$306,073 balance of work completed in 2017. The results are included in Appendix 2 of this addendum.

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 \$66,899 for completion in 2018.

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

NorthWestern Energy Efficiency Plus

Appendix 2 2015 Electric USB Program Expenditures and Contractual Commitments

	Revenue A	Revenue Allocation				Contracted -	Allocation &
	per Order 7458	Reallocation ^(a)	Spent in 2015	Spent in 2016	Spent in 2017	Complete in 2018	Expenses
Local Conservation	595,752	75,903	425,692	245,963	-	-	671,655
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
Market Transformation	380,420	(75,903)	304,518	-	-	-	304,518
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
Renewable Resources	681,333	47,793	41,805	335,893	284,528	66,899	729,125
Generation/Education			1,000	335,893	284,528	66,899	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	284,528	66,899	729,125
Research & Development	157,358	(47,793)	73,210	14,811	21,545	-	109,566
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
Low Income	4,765,520	0	3,114,827	1,650,693	-	-	4,765,520
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
Large Customer	2,950,657	0	2,020,653	926,368	3,635	-	2,950,657
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 (b)	1		(11,272)	-	-	-	(11,272)
NWE Allocated from 2015 to cover LC Expense (b)		1	-	8,764	-	-	8,764
Large Customer Summary	1		2,020,653	926,368	3,635	-	2,950,656
Unallocated	-	-	-	-			-
Totals	9,531,040	0	5,980,704	3,173,729	309,708	66,899	9,531,040
2015 USB Revenues less Expenses							

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

(b) 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 2017 WITH 2015 FUNDS

Energy Savings & I	Renewable	Resour	ce Estima	ates	
1	Projects	s Compl	eted in 20)17 wi	th 2015 USB \$
USB Category		aMW		MWH	MW
Local Conservation		-		-	-
Market Transformation		-		-	-
Renewables		0.02		144	0.110
Research & Development	NA		NA		NA
Low Income		0.00		0	0.000
Large Customer	NA		NA		NA
		0.02		145	0.110
	Participatio	n Summ	•		
USB Category / Program Segment			Quanti	ty	Units
Conservation					
Residential Onsite Audits				-	homes
Residential Mail out Audits				-	homes
Business Appraisals				-	businesses
Business Partners/Irrigation				-	projects
Business Partners/Small Choice				-	projects
Market Transformation					
Commercial Lighting				-	projects
NWE Building Operator Certification				-	people
Motor Training				-	people
Renewables Generation / Education				5	projects
Research & Development					
Renewable Energy Seminars/Workshops	i			181	attendees
Low-Income					
Bill Assistance				-	households
Free Weatherization				-	homes
Energy Share				-	households

TOTAL OF PROJECTS COMPLETED WITH 2015 FUNDS

Energy Savings & Re	newable	Resou	rce Estimates	
	Total F	rojects	Completed wit	h 2015 USB \$
USB Category		aMW	MWH	MW
Local Conservation		0.16	1,355	0.236
Market Transformation		0.34	2,953	-
Renewables		0.04	339	0.259
Research & Development	NA		NA	NA
Low Income		0.04	325	0.077
Large Customer	NA		NA	NA
		0.57	4,973	0.572
Program Pa	rticipatio	n Sumi	mary	
USB Category / Program Segment			Quantity	Units
Conservation				
Residential Onsite Audits			7	homes
Residential Mail out Audits			,	homes
Business Appraisals				businesses
Business Partners/Irrigation Business Partners/Small Choice			21	1
Business Partners/Small Choice			-	projects
Market Transformation				
Commercial Lighting			3	projects
NWE Building Operator Certification			35	people
Motor Training			55	people
Market Transformation Training			48	people
Renewables				
Generation / Education			14	projects
Research & Development				
Renewable Energy Seminars/Workshops			1,348	attendees
Low-Income				
Bill Assistance			11,629	households
Free Weatherization			501	homes
Energy Share			1,322	households

Addendum 2014 Report

Universal System Benefits Activities 2017 Annual Report

ADDENDUM to the 2014 Report

NorthWestern[°] Energy | Efficiency Plus

The 2014 NorthWestern 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, and the balance of \$154,254 was completed in 2017.

As noted in the 2016 report, 2014 funds were reallocated by NorthWestern to Low Income activities as the result of 2014 Renewable funds for 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 to be spent in 2017.

Renewable generation and Research and Development projects associated with \$106,301 were completed in 2017.

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

NorthWestern Energy Efficiency

Appendix 2 2014 Electric USB Program Expenditures and Contractual Commitments

	Revenue A	llocation					Allocation &
	per Order 6679e	Reallocation ^(a)	Spent in 2014	Spent in 2015	Spent in 2016	Spent in 2017	Expenses
Local Conservation	1,120,869	397,174	1,018,042	500,000	-	-	1,518,042
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
Market Transformation	715,735	(539,281)	176,454	-	-	-	176,454
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 (194)
Interest Income Market Transformation Summary			(194) 176,454	-	-	-	(194) 176,454
Renewable Resources	1.281.883	(266,728)		512 9/1	205 455	120 607	1,015,155
Generation/Education	1,201,003	(200,720)	76,252 13,788	512,841 512,841	295,455 295,455	130,607 82,654	822,084
Green Power Product			566	512,041	295,455	02,034	566
Promotion			7,632			-	7,632
Labor			52,197	-	-	-	52,197
Admin. Non-labor			2,416	-	-		2,416
Interest Income		I I	(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
Research & Development	296,059	116,607	100,798	78,256	209,965	23,647	412,666
R&D/ Infrastructure			72,282	45,525	202,696	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 Research & Development Summary			(80) 100,798	78,256	- 209,965	23,647	(80) 389,019
	2 007 040	202.220			203,000		
Low Income	3,237,949	292,229	3,137,043	393,135	-	-	3,530,178
Bill Assistance			2,421,608	-	-	-	2,421,608
Free Weatherization			408,725	307,977	-	-	716,701
Elec Wx Incentives			16,916 2,400	-	-	-	16,916 2,400
Fuel Switch Analyses Energy Share			2,400	- 85,158	-	-	2,400 324,158
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 (b)			(1,257)	-	-	-	(1,257)
Low Income Summary			3,137,043	393,135	-	-	3,530,178
Large Customer	2,890,506	(0)	2,191,636	695,783	3,087	-	2,890,506
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 (c)			-	11,272	-	-	11,272
NWE Allocated from 2013 to cover LC Expense (c)			(6,839)	-	-	-	(6,839)
Large Customer Summary			2,191,636	695,783	3,087	-	2,890,506
Unallocated	-	-	-	-	-	-	-
onanocated							
Totals	9,543,001	(0)	6,700,225	2,180,014	508,507	154,254	9,543,001

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

(b) 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.

(e) 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 2017 WITH 2014 FUNDS

Energy Savings &	Renewable	Resour	ce Estimates	;	
1	Project	s Comp	leted in 2017	with 2014	USB \$
USB Category		aMW	MV	VH	MW
Local Conservation		-	-		-
Market Transformation		-	-		-
Renewables		0.01		18	0.037
Research & Development	NA		NA		NA
Low Income		0.00		4	0.000
Large Customer	NA		NA		NA
		0.01	5	52	0.037
	Participatio	on Sumn	nary		
USB Category / Program Segment			Quantity	Units	
Conservation					
Residential Onsite Audits			-	homes	
Residential Mail out Audits			-	homes	
Business Appraisals			-	business	ses
Business Partners/Irrigation			-	projects	
Business Partners/Small Choice			-	projects	
Market Transformation					
Commercial Lighting			-	projects	
NWE Building Operator Certification			-	people	
Motor Training			-	people	
Renewables Generation / Education				2 projects	
Research & Development					
Renewable Energy Seminars/Workshops	i		25	57 attendee	S
Low-Income					
Bill Assistance			-	househo	lds
Free Weatherization				5 homes	
Energy Share			-	househo	lds

TOTAL OF PROJECTS COMPLETED WITH 2014 FUNDS

Energy Savings & Renewable Resource Estimates				
	Total Projects Completed with 2014 USB \$			
USB Category		aMW	MWH	MW
Local Conservation		0.23	1,987	0.398
Market Transformation		0.00	42	0.004
Renewables		0.09	808	0.616
Research & Development	NA		NA	NA
Low Income		0.03	229	0.112
Large Customer	NA		NA	NA
		0.35	3,066	1.130
Program Participation Summary				
USB Category / Program Segment			Quantity	Units
Conservation				
Residential Onsite Audits			_,	homes
Residential Mail out Audits			1	homes
Business Appraisals			= • •	businesses
Business Partners/Irrigation			37	projects
Business Partners/Small Choice			-	projects
Market Transformation				
Commercial Lighting			1	projects
NWE Building Operator Certification			-	people
Motor Training			48	people
Market Transformation Training			40	people
Renewables				
Generation / Education			65	projects
Research & Development				
Renewable Energy Seminars/Workshops			2,081	attendees
Low-Income				
Bill Assistance			12,569	households
Free Weatherization			357	homes
Energy Share			1,429	households