

Changes & Corrections Summary

Introduction Letter from the Vice President

April 1, 2016

Dear Customers:

Greetings, I'm pleased to introduce the Changes and Corrections Summary for the 2015-2016 Implementation Manual. As you know, in the Energy Efficiency Post-2011 Implementation Program, Bonneville Power Administration (BPA) agreed to publish the Implementation Manual (IM) once per year. Though we have moved to an "annual Manual", customers did request a small subset of changes be allowed off cycle in April: new measures, optional calculators, removal of a requirement and language clarifications. Rather than update the Implementation Manual, we have included these immediately effective changes in the Changes and Corrections Summary.

The new features for the Changes and Corrections Summary are as follows:

- The changes have been organized by the effective date – all of the April changes are grouped together first and those effective in October come after.
- We've replaced the referenced page number with the chapter section.
- There have been no language changes within the actual body of the IM. All are contained within the Change Summary, but we have italicized the language that has actually been changed for distinction.
- The only change we have made to the current IM, is to use an asterisk in the table of contents of each chapter to indicate that an update or edit can be found in the Changes and Corrections Summary

In addition to the Changes and Corrections Summary, there is another modification I want to draw your attention to. Effective October 1, 2016, there will be some significant changes to the way busbar savings are calculated for Unit Energy Savings (UES) measures. This is due to BPA adopting the new Regional Technical Forum methodologies stemming from the Council's 7th Power Plan. The updated version of Pro Cost (the tool used to estimate savings from the site level to busbar) has a new methodology to analyze the load shapes and determine a measure's contribution to peak load capacity reductions. Measures that reduce demand during peak have a higher busbar, while measures that do not (irrigation for example), have lower busbar savings. Please take a moment to read the "Significant Changes Coming to the UES Measure List in October 2016" which is enclosed.

We always strongly encourage customer engagement and feedback. This Change and Corrections Summary is our first attempt at a mid-year publication to supplement the annual Implementation Manual. We worked hard to incorporate your feedback, but if you would like to see course corrections or different processes in future iterations, we want to hear about it. If you have any suggestions for ways we can improve, please don't hesitate to share that with your Energy Efficiency Representative. In addition, we are still committed to a review of the potential for moving to a rate period IM. This is a commitment that we made as part of the Post-2011 Review. We will update you on that work and analysis before the end of FY16.

Thank you for your continued support and engagement. We value our relationships with you, our utility customers.



Sincerely,

Richard Gencé
Vice President, Energy Efficiency

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April Changes and Corrections Summary for the 2015-2016 Implementation Manual

The following changes are effective April 1, 2016:

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
General			
There are no changes.			
Introduction			
There are no changes.			
Definitions			
Additional language added to " Implementation Budget ". The definition now reads: "The amount of money BPA makes available to a customer (through its Energy Conservation Agreement) to expend on implementation costs during the implementation period. <i>This amount changes with every revised Exhibit A to the ECA. Performance Payments are calculated from the Implementation Budget.</i> "	Provide clarity that the budget amount changes with every revised Exhibit A to the ECA.	Correction	Definitions
A definition has been added for Low Energy Precision Agriculture (LEPA) . The definition is: <i>Low energy precision agriculture for center pivot and linear move irrigation systems uses hoses that drag on the surface of the soil. This application reduces water evaporation and can provide more uniform water application; reduced water evaporation; and lower pressure requirements for greater energy reduction.</i>	This definition has been added to support a new measure.	Change - New Measure	Definitions
A definition has been added for Low Elevation Sprinkler Application (LESA) . The definition is: <i>Low elevation sprinkler application for center pivot and lateral move irrigation systems places the sprinkler within three (3) feet of the soil surface.</i>	This definition has been added to support a new measure.	Change - New Measure	Definitions
A definition has been added for PTCS Commissioning, Controls and Sizing . The definition is: <i>Refers to the PTCS installation procedures of commissioning an Air Source Heat Pump or Variable Speed Heat Pump for the proper sizing of the unit, refrigerant charge, the control of auxiliary heat, thermostat and air flow to ensure the system is installed to operate efficiently. PTCS Commissioning, Controls, and Sizing may be applied to any new heat pump that meets the federal minimum standards. This measure cannot be claimed in combination with any other heat pump measure.</i>	It was unclear to some customers that Commissioning, Controls and Sizing is a reportable measure in the PTCS program.	Correction	Definitions

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION				
BPA Funding							
The hyperlink title in the Performance Payment section has been changed to "Performance Payment" calculator.	This hyperlink title is now corrected.	Correction	2.1.3				
General Requirements							
There are no changes.							
Custom Projects							
Correcting a typo in the Custom Projects Payment Rate table under the project type New Construction and Major Renovation. In the 4-19 Measure Life category, Residential will be included at the \$0.27/kWh payment rate and Industrial will be included at the \$0.25/kWh payment rate.	This correction will fix incorrect language and realign the IM with the Custom Project Calculator, which has accurately captured the Industrial measure's payment rates.	Correction	4.1				
Custom Programs							
There are no changes.							
Agricultural Sector							
<p>Agricultural Sector Payment Summary The Payment Summary table has been updated to include the new BPA Qualified LESA and LEPA measure incentives. The table section for Irrigation-Related Measures now includes:</p> <table border="1"> <tr> <td>Low Energy Precision Agriculture (LEPA)</td> <td>\$100.00</td> </tr> <tr> <td>Low Elevation Sprinkler Application (LESA)</td> <td>\$100.00</td> </tr> </table>	Low Energy Precision Agriculture (LEPA)	\$100.00	Low Elevation Sprinkler Application (LESA)	\$100.00	These measures are now available.	Change – New Measure	6.1
Low Energy Precision Agriculture (LEPA)	\$100.00						
Low Elevation Sprinkler Application (LESA)	\$100.00						
<p>Irrigation-Related Measures The payment table has been updated to include the new BPA Qualified LESA and LEPA measures, and revise footnotes. All payment remains the same. Affected lines on the payment table now read:</p> <p>New multi-trajectory sprays that replace impact sprinklersⁱⁱⁱ New multi-trajectory sprays that replace low-pressure sprinklers.ⁱⁱⁱ New goose-neck elbow for new drop tubes (to convert existing sprinkler equipment mounted on top of the pivot^{iv} to low-pressure sprinkler package or LEPA or LESA.^{iv})</p> <p>The following footnotes have been added: ⁱⁱⁱ Regular sprays allowed for LESA conversions. ^{iv} Allowed for LEPA or LESA conversions.</p>	These measures are now available.	Change – New Measure	6.3.1				

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
<p>Low Energy Precision Agriculture (LEPA) A new BPA Qualified measure for Low Energy Precision Agriculture (LEPA). The new language reads:</p> <p>Basis for Energy Savings The base case for this measure is a center pivot or lateral move system with low pressure sprinklers located at the mid elevation (e.g., 6 feet above the soil surface). This BPA Qualified measure is intended as an additional payment for conversion of a center pivot or lateral move irrigation system. LEPA can use a variety of methods to have the water delivered directly onto the soil using bubblers, hoses, and/or socks. Lowering the water delivery point directly onto the soil has been shown to reduce the water evaporation during the irrigation season, as well as reducing the pressure requirements of the irrigation system's overall pressure – and energy – required to efficiently water crops. LEPA may also provide more uniform water application, reduce incidence of disease, and may improve crop quality and yield. In BPA sponsored research, the water savings average of 5% to 15% has been observed.</p> <p>Requirements and Specifications This measure is an additional payment for each center pivot and lateral move irrigation system that is converted to LEPA. Sprinkler hardware measures such as goose necks, drop tubes, pressure regulators and sprinklers can also be claimed.</p> <p>Documentation Requirements End-user identifying information including unique site ID and address (e.g., field location, meter number, GPS coordinates, farm name, or legal property description).</p> <p>X BPA Reporting System</p> <p>X Customer File</p> <p>Equipment/contractor invoice is to include: manufacturer, model number, type or size of equipment or product installed/used and quantity, the order/purchase date and cost.</p> <p>X Customer File</p> <p>Completed Project Information Form for LEPA/LESA conversions (available in the Document Library).</p> <p>X eedocs@bpa.gov</p> <p>X Customer File</p> <p>Payment BPA will pay \$100.00 for each system conversion and upon submission of the project information form. Customers can separately claim all qualifying irrigation measures installed for the LEPA conversion in the UES Measure Upload Template.</p>	<p>This measure is now available.</p>	<p>Change – New Measure</p>	<p>6.3.4</p>

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
<p>Low Elevation Sprinkler Application (LESA) A new BPA Qualified measure for Low Elevation Sprinkler Application (LESA) has been added. The new language reads:</p> <p>Basis for Energy Savings The base case for this measure is a center pivot or lateral move system with low pressure sprinklers located at the mid elevation (e.g., 6 feet above the soil surface). This BPA Qualified measure is designed for center pivot and lateral move irrigation systems and places the sprinkler within 3 feet of the soil surface. LESAs improve application efficiency, reduce direct evaporation from the sprinkler, and require less pressure to operate; thus reducing the energy consumption. A LESA-equipped irrigation system can save water, save energy, reduce fertilizer requirements (and costs) and has the potential to improve crop yield. In BPA sponsored research, water savings average of 5% to 15% has been observed.</p> <p>Requirements and Specifications This measure is an additional payment for each center pivot and lateral move irrigation system that is converted to LESA. Sprinkler hardware measures such as goose necks, drop tubes, pressure regulators and sprinklers can also be claimed.</p> <p>Documentation Requirements End-user identifying information including unique site ID and address (e.g., field location, meter number, GPS coordinates, farm name, or legal property description).</p> <p>X BPA Reporting System</p> <p>X Customer File</p> <p>Equipment/contractor invoice is to include: manufacturer, model number, type or size of equipment or product installed/used and quantity, the order/purchase date and cost.</p> <p>X Customer File</p> <p>Completed Project Information Form for LEPA/LESA conversions (available in the Document Library).</p> <p>X eedocs@bpa.gov</p> <p>Payment BPA will pay \$100.00 for each system conversion and upon submission of the project information form. Customers can separately claim all qualifying sprinkler hardware measures such as goose necks, pressure regulators and sprinklers installed for the LESA conversion in the UES Measure Upload Template.</p>	<p>This measure is now available.</p>	<p>Change – New Measure</p>	<p>6.3.5</p>

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
Commercial Sector			
<p>Unitary Air Conditioning Equipment in Commercial Buildings Clarified former language "Heat pumps are excluded". The language now reads: Unitary air conditioning equipment refers to air-cooled, packaged, air conditioning equipment for both new construction and retrofits in commercial buildings. This equipment can be used in conjunction with gas or electric heating systems. <i>Heat pump installations are not eligible for this measure.</i></p>	Modified language for clarity.	Correction	7.4.1
<p>Advanced Rooftop Unit Control (ARC) Retrofit Removed Type 1 ARC Retrofit requirement for operational economizer and continuous operation during occupied hours; removed Type 1 and Type 2 ventilation requirements. The language now reads: <i>Qualifying ARC Retrofit applications must meet the following requirements:</i> <i>The existing RTU must have the following qualities:</i></p> <ul style="list-style-type: none"> • Greater than five tons of cooling capacity. • Unitary equipment (no split-systems). • Constant speed supply fan (no variable speed fans). <p><i>The Type 1) Full ARC Retrofit must have the following qualities:</i></p> <ul style="list-style-type: none"> • Either supply-fan variable speed, multi-speed or cycling, and • Digital, integrated economizer control. <p><i>The Type 2) Lite ARC Retrofit must provide:</i></p> <ul style="list-style-type: none"> • Either supply-fan variable speed, multi-speed or cycling. 	This change was made to expand measure eligibility.	Change - Removal of Requirement	7.4.2
<p>Heat Pumps in Commercial Buildings Added language to clarify that heat pumps must meet all applicable CEE Tier 1 or Tier 2 performance specifications (e.g. both EER and IEER). The language now reads: Requirements and Specifications: <i>To qualify, the installed equipment must be an air to air heat pump system that meets all applicable CEE Tier 1 or Tier 2 performance specifications (e.g. both EER and IEER).</i></p>	This change is made to clarify that products must meet all tier specifications.	Correction	7.4.4
<p>Door gasket replacement for walk-in and reach-in coolers and freezers Units in the payment table have been changed to "per door". The language now reads: Payment (<i>per Door</i>).</p>	Units listed in the payment table have been corrected.	Correction	7.8.10
<p>Electric Commercial Steam Cookers The payment table has been modified to apply to 10-pan "or greater". The language now reads: 10 pan or <i>greater</i>.</p>	The payment table in Oct. 1, 2015 left out "or greater" in description of the 10-pan unit.	Correction	7.9.2

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
<p>Retrofit Windows for Commercial Buildings (BPA Qualified) While the IM clearly states that all electric heating types qualify for this measure, there is currently no option for electric forced air in the UES Measure List. Until this is added to the UES Measure List in October, utilities may report electric resistance forced air as zonal heat in the measure list.</p> <p>A footnote has been added to the payment table that reads:</p> <p>¹ <i>Existing conditions with electric forced air may be reported as zonal heat in the UES measure list</i></p>	<p>This change is made to clarify measure eligibility.</p>	<p>Correction</p>	<p>7.5.2</p>
<p>Electric Water Heater Payment has been changed from “per unit” to clarify “per water heater.” The language now reads:</p> <p>Payment BPA will pay \$25.00 / water heater.</p>	<p>Clarification.</p>	<p>Correction</p>	<p>7.6</p>
<p>Heat Pump Water Heater (BPA Qualified) Language was added to clarify that all Tiers on the Northern Climate Specifications meet requirements. The language now reads:</p> <p>Requirements and Specifications <i>This measure is for the installation of Heat Pump Water Heaters in commercial buildings. To qualify, the product must be listed on NEEA’s Northern Climate Specification HPWH qualified products list. All tiers on the Northern Climate Specification qualify.</i></p>	<p>This change is to clarify measure requirements.</p>	<p>Correction</p>	<p>7.7</p>
<p>Energy Star Commercial Clothes Washers The requirement for laundromats was removed so that these savings apply to other types of businesses. The word “laundromat” has been removed from the payment table. The language now reads: <i>“The clothes washer must be an ENERGY STAR product.”</i></p>	<p>This measure is no longer restricted to laundromats.</p>	<p>Change - Removal of a Requirement</p>	<p>7.10.2</p>
<p>Smart Power Strips The word “offices” has been removed from the description of Commercial Sector Smart Power Strips. The language now reads:</p> <p>Requirements and Specifications <i>Smart Power Strips must be distributed via Direct Install or By Request per the Measure Distribution Processes section in the Multi-Sector chapter and must automatically switch off power to peripheral plug loads, while preventing false switching through the use of resistor-capacitor circuit filters or equivalent.</i></p>	<p>This measure is no longer required to be in offices only.</p>	<p>Change - Removal of a Requirement</p>	<p>7.10.3</p>
Federal Sector			
<p>There are no changes.</p>			

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
Industrial Sector			
<p>Energy Project Manager The payment table for Payment No. 4 has been clarified to allow for multiple EPMs. The language now reads:</p> <p>Payment No. 4 The lesser of (a) \$0.025 per kWh of actual verified busbar energy savings, (b) the total annual cost of the EPM(s) as described in the EPM Comprehensive Plan, or (c) \$250,000.00 per EPM(s) <i>contracted</i>, less previous payments.</p> <p>The footnote ⁱⁱ has been modified and now reads: ⁱⁱ Funding is based on the lesser of (a) \$0.025 per kWh of the verified energy savings goal, (b) the total annual cost of the EPM(s) as described in the EPM Comprehensive Plan, (c) \$250,000.00 <i>per EPM(s) contracted</i>, or (d) an amount specified within the EPM agreement.</p>	<p>At the request of BPA utilities, this clarification provides greater flexibility for EPM cofunding, while reducing complexity, paperwork and the reducing the labor burden of needing multiple agreements for utilities, end users and BPA ESI.</p>	<p>Correction</p>	<p>9.3.1.1</p>
<p>SEM Projects (Optional Energy Management Feature) The language in the Requirements, Savings Reports table M&V Protocol section has been clarified. The section now reads:</p> <p>Both Option 1 and Option 2 customers must calculate verified energy savings following the M&V prescribed in the ESI MT&R Reference Guide (available in the Document Library).</p> <p>SEM energy savings may not include energy savings from other ESI program components BPA programs (e.g., custom projects or deemed projects).</p> <p><i>SEM energy savings are relative to a baseline period immediately preceding the performance year.</i></p>	<p>At the request of BPA utilities, this clarification addresses any confusion on how BPA determines SEM energy savings.</p>	<p>Correction</p>	<p>9.3.1.2</p>
<p>SEM Projects (Optional Energy Management Feature) The Milestone "BPA Approves Annual Completion Report Payment" language in the Requirements, Savings Reports table M&V Protocol has been changed. The language now reads:</p> <ul style="list-style-type: none"> • Supporting Invoices provided Lesser of the following: <ul style="list-style-type: none"> o \$0.075 per kWh of verified annual busbar adjusted energy savings. o 70% of documented action item costs. • No Invoice. <ul style="list-style-type: none"> o \$0.025 per kWh of verified annual busbar-adjusted energy savings. 	<p>At the request of BPA utilities this clarification addresses any questions about SEM Project payment milestones.</p>	<p>Correction</p>	<p>9.3.1.2</p>

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
Residential Sector			
<p>Linear Fluorescent Fixtures The requirement for a minimum ballast efficiency factor (BEF) has been removed. The following language and referenced table will be removed:</p> <p><i>Linear fluorescent fixtures must be Energy Star Qualified High Performance T8 with a minimum ballast efficacy factor as shown in the table below. Qualified fixtures may be found on the Linear Fluorescent Fixture Qualified Products List in the Document Library.</i></p>	Measure savings do not require this additional information.	Change - removal of requirement	10.2.1
<p>Simple Steps, Smart Savings Non-Participating Sales generated by the Simple Steps program will be reported by BPA for credit towards regional self-funding goals. The language now reads:</p> <p>The Simple Steps program results in energy efficiency savings that are distributed among the utility participants using the Retail Sales Allocation Tool (RSAT). Additionally, because the program model requires a commitment to all qualified sales of efficient products in active stores (including those that would be attributed to non-participating utilities) the program also acquires savings from these unclaimed sales. <i>These non-participating/unclaimed sales will be reported by BPA for credit towards regional self-funding goals to be consistent with the Implementation Manual requirements and utility ECA agreements.</i></p>	This policy for reporting Non-Participating Sales was approved by the BPA Management Team to be in alignment with the Implementation Manual and utility ECA Agreements.	Correction	10.4
<p>Ductless Heat Pumps – all The note about a 208 voltage/230 volt circuit requirement has been removed from the Ductless Heat Pump qualified products list. The DHP Qualified Products List has been updated.</p>	This voltage requirement was put in place for the launch of the NW DHP Project to help ensure equipment quality. The current HSPF specification eliminates the need for the voltage requirement.	Change - Removal of requirement	10.9.1
<p>Ductless Heat Pumps – all Under Requirements and Specifications the requirement “Ducted indoor DHP units do not qualify for payment” has been modified. The language now reads:</p> <p><i>“Ducted indoor DHP units do not qualify for payment as a DHP but may be claimed as a PTCS Variable Speed Heat Pump provided the installation meets all PTCS requirements.”</i></p>	Mini-splits are simply small Variable Speed Heat Pumps (VSHP).	Correction	10.9.1
<p>Ductless Heat Pumps – all Ductless Heat Pumps payments are one DHP per house. The language now reads:</p> <p>Payment <i>Payments are per home as listed in the table below.</i></p>	The energy savings does not support more than one DHP payment per house. This language was accidentally deleted in the October 2015 IM update.	Correction	10.9.1

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
<p>PTCS Heat Pumps – all The CheckMe! form has met all requirements to be considered equivalent to the PTCS Air Source Heat Pump form. The language now reads:</p> <p>Documentation Requirements Heat Pump forms / certificates (available in the Document Library)</p> <ul style="list-style-type: none"> • PTCS Air Source Heat Pump Form or CheckMe!® Heat Pump Protocol Data Entry Form for PTCS Summer and Winter (handwritten form completed by the technician); • AHRI Certificate; and • Technician documentation used to determine size of heat pump per PTCS specifications, by submitting either: <ul style="list-style-type: none"> • Both “heating load/heat loss calculations”, and a “balance point worksheet,” or • “PTCS Heat Pump and Central Air Conditioner Sizing Calculator.” <p>Additional information: PTCS Air Source and Variable Speed Heat Pumps are subject to Quality Assurance oversight by a BPA-approved Quality Assurance Inspector. The PTCS Air Source and Variable Speed Heat Pump specifications require the PTCS technician to provide (and utilities to keep on file) the Technician’s documentation of sizing calculations (e.g., Both the “Heating Load/Heat Loss calculations”, and “Balance Point Worksheet,” or “PTCS Heat Pump and Central Air Conditioner Sizing Calculator”). Installations lacking this information will fail to pass their Quality Assurance inspection. <i>The updated CheckMe!® Heat Pump Protocol Data Entry Form for PTCS -Summer and Winter forms are considered equivalent to the PTCS Heat Pump Form.</i></p>	<p>The PTCS Program has confirmed that the CheckMe!® Heat Pump Protocol Data Entry Form for PTCS (Summer and Winter) form captures all required PTCS data to meet PTCS requirements and specifications. This clarification is retroactive to the beginning of the current rate period October 1, 2015.</p>	<p>Correction</p>	<p>10.9.2.1</p>
<p>PTCS Heat Pumps – all A clarification of the PTCS Heat Pumps Installation specifications is provided. The specification language stating <i>“The heat pump system shall be sized, rounding up or down to the nearest 6000 Btu/hr capacity at AHRI rating conditions, using a balance point of 30°F or less”</i> does not specifically require that the Balance Point be 30°F or less. A range that includes less than 30°F or up to 35°F is acceptable to meet the Basis for Energy Savings.</p>	<p>The calculation of the Balance Point requires inputs about the Building UA of the home (envelope, tightness, etc.) the location of the home (Heating Zone/Cooling Zone), the size of the home and more. With all of these variables to consider, requiring a precise Balance Point does not match market practice. The savings assumptions support a Balance Point of less than 30°F up to 35°F as a reasonable range for a quality installation.</p>	<p>Correction</p>	<p>10.9.2.1</p>
<p>Montana House (ID/MT/NV/WY) These New Construction measures are also reportable by BPA utilities in Nevada and Wyoming.</p>	<p>The savings assumptions support the application of these measures in these neighboring states.</p>	<p>Correction</p>	<p>10.11.4</p>
<p>A new measure was added for Insulated Exterior Doors Multifamily.</p>	<p>This new measure is now available.</p>	<p>Change - new measure</p>	<p>10.12.3</p>

DESCRIPTION			RATIONALE	CHANGE OR CORRECTION?	SECTION
<p>Insulated Exterior Doors Under Requirements and Specifications, the sentence “Multifamily does not qualify at this time” is void with the introduction of the new measure for Multifamily. The language now reads:</p> <p>This measure is available for existing single-family or manufactured homes or multifamily homes.</p>			This sentence is no longer required.	Change - removal of requirement	10.12.3
<p>Whole House Air Sealing – all Under Requirements and Specifications, the following is added: “This measure is available for existing single family or manufactured homes. Multifamily does not qualify at this time.” The language now reads:</p> <p>Requirements and Specifications</p> <ul style="list-style-type: none"> • <i>This measure is available for existing single family or manufactured homes. Multifamily does not qualify at this time.</i> • Whole house air sealing requires the use of a blower door to measure and identify air leakage locations in the home. Mechanical ventilation may be required. • If PTCS duct sealing is performed at the same time as air sealing, the baseline blower door CFM50 reading for the whole house air sealing and testing measure must be taken with all the supply and return duct registers temporarily sealed off, so that house air leakage can be measured independently from duct leakage. • If combustion appliances are present (e.g., fireplace, wood or gas stove, gas range, gas water heater), a UL- or CUL-approved carbon monoxide detector must be present or be installed. 			This information was inadvertently not included in a past update.	Correction	10.12.4
<p>A new measure was added for Low Income Insulated Exterior Door Multifamily. The payment for measure costs is capped at \$400/door. The multifamily section in the payment table now reads:</p>			This new measure is now available.	Change - new measure	10.12.6
Prime Window	Dollar for dollar, not to exceed \$20.00/ square foot.	Examples include: address dry-rot in window framing, replace rotten threshold, repair cracked header.			
Patio Door	Dollar for dollar, not to exceed \$20.00/ square foot.				
Insulated Exterior Door	Dollar for dollar, not to exceed \$400.00/ door.				

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
Utility Distribution Sector			
There are no changes.			
Multi-Sector			
<p>Measure Distribution Processes Language has been added to the By Request and Direct Install sections to clarify that the end-user survey is only for Residential Advanced Power Strips and does not apply to Commercial Smart Power Strips. The language now reads:</p> <p>Additional requirements such as: documenting water heater fuel for showerheads and distributing a Customer Survey for Advanced Power Strips may apply. <i>The Customer survey is not required for Commercial Smart Power Strips.</i></p>	This change is made to clarify requirements.	Correction	12.2.2
<p>Multi-Sector Non-residential Lighting Added clarification to the batch submission process. The language now reads:</p> <p><i>The following requirements are for submitting batch lighting projects. Using the batch submission format is intended to streamline large-scale projects and is optional. Individual lighting calculators may be submitted instead of using the batch format.</i></p> <p><i>Requirements: The project addresses or locations shall be entered in the notes section of the lighting calculator or in a customer-generated spreadsheet. When applicable, the customer address may be entered as the site address. In cases where a street address is not applicable, enter the nearest street intersection.</i></p>	Clarified that the batch submission process is optional for multiple installations.	Correction	12.3.3

Significant Changes Coming to the UES Measure List in October 2016

Now that the dust from the Council's 7th Power Plan is settling, BPA is working to adopt the new Regional Technical Forum (RTF) methodologies. This has resulted in some significant changes to the BPA Unit Energy Savings (UES) measure list: the majority of UES measures will have slightly different busbar savings and reimbursement values, which will go into effect on October 1, 2016. Below is a preview of what's to be expected.



The Cost Effectiveness Methodology has Changed

The 7th Power Plan identifies many future scenarios where the region is capacity constrained. The least cost method to ease the capacity constraints include both energy efficiency and demand response. Therefore the new cost effectiveness methodology places more rigor in its analysis of the capacity value of energy efficiency and its relation to cost effectiveness. The result of this is that benefit/cost ratios for some key measures have increased.

There are some significant changes to the way that we now estimate an energy efficiency measure's effect on the generation system during heavy load hours (generally 6pm on week nights). The updated version of Pro Cost (the tool used to estimate savings from the site level to the system wide busbar level) has new load shapes from the last Residential Building Stock Assessment (RBSA) metering sample. In addition, the RTF has changed the methodology used to analyze the load shapes and determine a measure's contribution to peak load capacity reductions. These values increase the cost effectiveness for measures that are saving energy during heavy load hours, and decrease the cost effectiveness for measures that do not save energy during heavy load hours. More information on the new cost effectiveness methodology can be found from a recent RTF presentation [here](#).



Every UES Measure has New Busbar Savings

The RTF has moved to the new version of Pro Cost as well as newly developed Total Resource Cost Test (TRC) benefit-cost ratios. The site vs busbar relationship now depends on the measure's load shape and the extent to which that measure saves energy during heavy load hours. A measure that saves energy during heavy load hours has greater busbar savings than a measure that does not save as much energy during peak hours. Essentially, busbar savings will reflect measure savings during regional peak load hours.

This change required the BPA Planning team to update every current and new UES measure with the new version of Pro Cost, meaning every measure will have slightly updated busbar savings in the October 1, 2016 UES Measure List. This BPA Implementation Manual (IM) Change Summary Notice published on April 1, will be accompanied by an [Excel workbook](#) which will list every reference number in the current measure list along with current and new payment and savings. Start with the introductory "READ ME" tab and click through them to see what's coming in October.



Numerous RTF Measure Updates Affected in the October 2016 UES Measure List

The update impacts all UES measures. Because the Residential Sector has the most UES measures, the impact on this sector is the greatest. Some of the biggest savings changes will occur in manufactured home weatherization, ductless heat pumps, air source heat pumps, and duct sealing. Some of the RTF updates will result in a measure set with new reference numbers, and some will not. BPA will try to keep the same reference numbers wherever possible. Measure sets that will have new reference numbers will be thoroughly documented. BPA will produce a cross walk table from the old set of reference numbers to the new set of reference numbers for each changing measure set at the same time we release the October 1, 2016 UES measure list.



The Measure List Will Look Different

With stakeholder input, last year BPA significantly reduced the number of columns in the measure list and rearranged the order to a more logical format where possible. BPA also changed the key characteristics and other language presentation for measures that changed in October 2015. This has created inconsistencies between measure sets that are sometimes confusing. BPA has been documenting feedback from utilities and stakeholders on how to improve the presentation of measures. From April until late May we will be informally collecting additional feedback to address these inconsistencies more comprehensively in time for the October 2016 update. Please send comments to your Energy Efficiency Representative.



What does this mean for all the IS2.0 calculators?

BPA is developing an approach to evaluate the impacts on calculators used in programs, including the custom project calculator. Modifying each of the calculators to reflect the updated methodology will be complicated to implement and considering detailed notice to customers could not be provided in time, additional time and research is needed to analyze the scope of the impact. We realize this puts the UES Measure List and programmatic calculators slightly out of sync but an internal decision was made to take the necessary time to review the calculators and determine where modifications may need to be made. Please know that this issue is on our radar but we have limited additional information to provide at this point. Watch for utility collaboration and discussion opportunities in the near future.



Additional Support is Available

If you have any questions or concerns, please don't hesitate to reach out to your Energy Efficiency Representative or check out the bpa.gov/ee website for more information.

October Changes and Corrections Summary for the 2016-2017 Implementation Manual

The following changes are effective October 1, 2016:

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
General			
There are no changes.			
Introduction			
There are no changes.			
Definitions			
<p>Definition of "Busbar Energy Savings" has been modified. The definition now reads:</p> <p><i>Energy that did not have to be produced at the generator. The site energy savings plus any transmission and distribution losses that would have occurred had the energy been generated. The site and busbar relationship depends upon the particular measure being implemented and its associated load shape.</i></p>	The multiplier now varies based on the measure type.	Correction	Definitions
BPA Funding			
There are no changes.			
General Requirements			
There are no changes.			
Custom Projects			
There are no changes.			
Custom Programs			
There are no changes.			
Agricultural Sector			
All RTF approved UES measures have been updated. Site and Busbar savings are now unique to each load shape, therefore savings per measure may increase or decrease as a result of these updates.	The RTF has updated all UES measures to incorporate the updated 7th Plan Cost Effectiveness Methodology and the updated ProCost modeling tool. Capacity benefits were added as well as new load shape data.	Change	6

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
Commercial Sector			
All RTF approved UES measures have been updated. Site and Busbar savings are now unique to each load shape, therefore savings per measure may increase or decrease as a result of these updates.	The RTF has updated all UES measures to incorporate the updated 7th Plan Cost Effectiveness Methodology and the updated ProCost modeling tool. Capacity benefits were added as well as new load shape data.	Change	7
Unitary Air Conditioning Equipment in Commercial Buildings BPA will retire this measure.	This measure is expiring.	Change: Expiration of Measure	7.4.1
Advanced Rooftop Unit Control (ARC) Retrofit Type 1 ARC Retrofit will be updated to require web-enabled monitoring and alarms.	This change is to enhance functionality and end-user control.	Change: New Requirement	7.4.2
Ductless Heat Pumps in Commercial Buildings Clarify that areas conditioned by Air Source Heat Pumps do not qualify for DHP payments and adding clarification to requirements and specifications.	This clarification was made to refine measure eligibility based on existing conditions.	Correction	7.4.3
Ductless Heat Pumps in Commercial Buildings The payment will change to \$800 per ton.	This change will be made to increase program uptake.	Change: Payment up or down	7.4.3
Ductless Heat Pumps in Commercial Buildings A Qualified Products List will be published.	This change will be made to streamline implementation.	Change: New Requirement	7.4.3
New Measure for Heat Pump Upgrades Effective October 1, 2016, a new measure will be created for Heat Pump Upgrades. This measure will be applicable to both existing buildings and new construction. Note that the Commercial Heat Pump Tool will no longer be required for this measure.	This measure will be available.	Change: New Measure	New
Web-Enabled Programmable Thermostats (Connected Thermostats) The payment will change to \$200 per qualified thermostat.	This change will be made to simplify measure implementation.	Change: Payment up or down	7.4.5
EnergySmart Grocer Section 7.8.1 will be removed. ESG ended March 31, 2016, and will be largely removed from the IM October 1, 2016, except for the section concerning ESG Performance Payments which will continue to apply through September 30, 2017.	The ESG program has ended.	Change: Expiration of Program	7.8.1
Display Case – Evaporator Fan Motor Shaded Pole to ECM savings will increase.	Energy savings will increase per recent RTF decision.	Change: Savings up	7.8.8
Demand Controlled Kitchen Ventilation This measure will apply to retrofits only, and will no longer apply to new construction.	This change is due to numerous variations in state codes.	Change: new requirement	7.9.1
Commercial Insulation The requirement for pre-existing insulation levels will be changed from R-0 to less than or equal to R5 ($\leq R5$).	This change was made to expand measure eligibility so that it is applicable to conditions where there is no or very little existing insulation.	Change: Removal of a requirement	7.5.1

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
<p>Retrofit Windows for Commercial Buildings (BPA Qualified) A new measure will be created in the measure list to enable reporting of buildings with electric forced air heat.</p>	The new measure will be added to increase ease of measure reporting.	Change: New measure	7.5.2
<p>Retrofit Windows for Commercial Buildings (BPA Qualified) The building space requirement will be changed from 5,000 sq. ft. or less to 20,000 sq. ft. or less.</p>	This change is intended to increase the amount of businesses that would benefit from window retrofits.	Change: Substitution of a Requirement	7.5.2
<p>Retrofit Windows for Commercial Buildings (BPA Qualified) The “wood frame construction” requirement will be removed from this measure making all building types applicable.</p>	This change will be made to expand measure eligibility.	Change: Removal of a Requirement	7.5.2
<p>Electric Water Heater The incentive will be \$50/water heater.</p>	The incentive and savings will increase as a result of the RTF updating the analysis for existing baselines.	Change: Savings and Payment	7.6
<p>Heat Pump Water Heater (BPA Qualified) New measures will be created for all HPWH Tiers.</p>	New measures for new tiers will have new savings.	Change: New Measure	7.7
<p>Heat Pump Water Heater (BPA Qualified) Existing water heaters must be electric. Existing gas water heaters will not qualify for payment.</p>	This change will be made to clarify measure eligibility.	Change: New Requirement	7.7
<p>Networked Computer Power Management This measure will no longer be eligible for incentives.</p>	This measure has expired.	Change: Expiration of Measure	7.10.1
<p>Energy Star Commercial Clothes Washers Required information on the product documentation will be replaced.</p>	This change is to align documentation requirements with other EnergyStar product documentation requirements.	Change: Substitution of a Requirement	7.10.2
<p>Energy Star Commercial Clothes Washers The savings for this measure will change.</p>	The savings will change due to an RTF action.	Change: Savings	7.10.2
<p>Smart Power Strips “Load sensing” will be removed from the measure title so that motion sensing power strips also qualify for payment.</p>	The RTF savings estimate for Smart Power Strips was based on both load sensing and motion sensing power strips.	Change: Removal of a Requirement	7.10.3
Federal Sector			
All RTF approved UES measures have been updated. Site and Busbar savings are now unique to each load shape, therefore savings per measure may increase or decrease as a result of these updates.	The RTF has updated all UES measures to incorporate the updated 7th Plan Cost Effectiveness Methodology and the updated ProCost modeling tool. Capacity benefits were added as well as new load shape data.	Change	8

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
Industrial Sector			
All RTF approved UES measures have been updated. Site and Busbar savings are now unique to each load shape, therefore savings per measure may increase or decrease as a result of these updates.	The RTF has updated all UES measures to incorporate the updated 7th Plan Cost Effectiveness Methodology and the updated ProCost modeling tool. Capacity benefits were added as well as new load shape data.	Change	9
Residential Sector			
All RTF approved UES measures have been updated. Site and Busbar savings are now unique to each load shape, therefore savings per measure may increase or decrease as a result of these updates. This update impacts nearly every measure in the Residential portfolio. All measure changes are documented in the October 2016 Measure Changes available in the Document Library.	The RTF has updated all UES measures to incorporate the updated 7th Plan Cost Effectiveness Methodology and the updated ProCost modeling tool. Capacity benefits were added as well as new load shape data. Measures below impacted are denoted with "7th Plan UES update.	Change	10
ENERGY STAR CFLs Savings and payments will be reduced for CFL measures. Measure changes are documented in the October 2016 Measure Changes available in the Document Library.	The reduction of payment is the result of decreased savings and incremental costs and the 7th Plan UES update. The lumen bins for these measures were also updated.	Change	10.2.1
ENERGY STAR CFL Fixture measures will expire on September 30, 2016.	These measures are no longer supported by the RTF and CFLs are expected to significantly decline in the retail marketplace in 2016.	Change	10.2.1
Linear Fluorescent Fixtures Savings will change for these measures. Measure changes are documented in the October 2016 Measure Changes available in the Document Library.	The change in savings is a result of the 7th Plan UES update.	Change	10.2
ENERGY STAR LEDs Savings and payments will change for LED bulbs. See the October 2016 Measure Changes available in the Document Library for details.	The change in savings is a result of review by the RTF of all measure inputs, an update of the lumen bins, and the 7th Plan UES update.	Change	10.2.2
ENERGY STAR LED Fixtures Savings will change for these measures. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.	The change in savings is a result of correction in the hours of use and the 7th Plan UES update.	Change	10.2.2
Showerheads Savings and payments will change for these measures. See the October 2016 Measure Changes available in the Document Library for details.	The measures were updated by the RTF and the 7th Plan UES Update.	Change	10.3
Simple Steps, Smart Savings program CFL Fixtures, Refrigerators and Freezers will be removed from the Simple Steps program offer will be removed from the program offer effective September 30, 2016.	These measures will expire on September 30, 2016.	Change	10.4

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
<p>Advanced Power Strips Savings will decrease. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.</p>	The measures were updated by the RTF and the 7th Plan UES Update.	Change	10.5
<p>Clothes Washers Savings will change. Payments for most measures have been reduced. See the October 2016 Measure Changes available in the Document Library for details.</p>	The measures were updated by the RTF and the 7th Plan UES Update.	Change	10.6
<p>Clothes Dryers The Any Dryer measure will be expired. New Dryer measures will be available October 1, 2016. See the October 2016 Measure Changes available in the Document Library for details.</p>	In response to utility feedback BPA will create tiered Dryer measures to simplify reporting. The change in savings is a result of the 7th Plan UES update.	Change	10.6
<p>Refrigerator measures will expire on September 30, 2016.</p>	The recent Federal Appliance Standard update raised the baseline. These measures are no longer cost effective.	Change	10.7
<p>Freezer measures will expire on September 30, 2016.</p>	The recent Federal Appliance Standard update raised the baseline. These measures are no longer cost effective.	Change	10.7
<p>Refrigerator and Freezer Decommissioning The savings for these measures will decrease. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.</p>	The measures were updated by the RTF incorporating new data on age of units and the 7th Plan UES Update.	Change	10.7
<p>Heat Pump Water Heaters These measures will be expired and replaced with “Any tank size” measures with updated savings and payments. See the October 2016 Measure Changes available in the Document Library for details.</p>	These measures were updated by the RTF as a result of the updated Federal Standard and the 7th Plan UES Update.	Change	10.8.1
<p>Heat Pump Water Heaters The HPWH form will be updated. This form will be available in the Document Library.</p>	The number of required fields has been reduced and both the signature block and release statement have been updated for consistency.	Change	10.8.1
<p>Pipe Insulation Savings will change for these measures. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.</p>	The change in savings is a result of the 7th Plan UES update.	Change	10.8.2
<p>Ductless Heat Pumps – all DHP requirements and specifications will be updated to also require the use of a vacuum pump during installation and that the DHP system shall be installed on a dedicated electrical circuit.</p>	The DHP specifications updates will provide additional safety measures on lower voltage units and pre-charged line-sets.	Change	10.9.1
<p>Ductless Heat Pumps - all The DHP form will be updated. This form is available in the Document Library.</p>	Required fields have been updated to reflect the change in DHP Specifications and both the signature block and release statement have been updated for consistency.	Change	10.9.1

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
<p>Ductless Heat Pumps – Single Family and Manufactured Homes (Zonal) Measure savings will change. The DHP zonal measures will be expanded to include measures by Heating Zone (HZ) and Cooling Zone (CZ). See the October 2016 Measure Changes available in the Document Library for details.</p>	<p>These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update. The measures were expanded by Cooling zones (CZ) based on the RTF UES Measure Guidelines.</p>	Change	10.9.1
<p>Ductless Heat Pumps – Single Family and Manufactured Homes (EFAF) Measure savings and payment will change. See the October 2016 Measure Changes available in the Document Library for details.</p>	<p>These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.</p>	Change	10.9.1
<p>PTCS Air Source Heat Pumps (ASHP) –Conversions and Upgrades, Single Family Measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.</p>	<p>These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.</p>	Change	10.9.2.1
<p>PTCS Air Source Heat Pump (ASHP) Conversion – Manufactured Homes Measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.</p>	<p>These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.</p>	Change	10.9.2.1
<p>PTCS Air Source Heat Pump (ASHP) Upgrades – Manufactured Homes Measure savings will change. There is no change to payment. Measures based on cooling zones (CZ) have been simplified to heating zone (HZ) only. See the October 2016 Measure Changes available in the Document Library for details.</p>	<p>These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update. Measures have been simplified to HZ only in response to customers' request for measure simplification.</p>	Change	10.9.2.1
<p>PTCS Air Source Heat Pump (ASHP) Commissioning & Controls, Single Family and Manufactured Homes Measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.</p>	<p>These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.</p>	Change	10.9.2.1
<p>PTCS Variable Speed Heat Pumps (VSHP) Conversions, Single Family Homes Measure savings and payments will change. Measures with CAC, based on cooling zones (CZ) have been simplified to heating zone (HZ) only. See the October 2016 Measure Changes available in the Document Library for details.</p>	<p>These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update. Measures have been simplified to HZ only in response to customers' request for measure simplification.</p>	Change	10.9.2.1
<p>PTCS Variable Speed Heat Pumps (VSHP) Upgrades - Single Family Homes Measure savings and payments will change. See the October 2016 Measure Changes available in the Document Library for details.</p>	<p>These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.</p>	Change	10.9.2.1
<p>Ground Source Heat Pumps – Conversions and Upgrades, Single Family Homes Measure savings will change. There is no change to payment. The list of measures has been simplified combining open and closed loop ground source heat pumps. See the October 2016 Measure Changes available in the Document Library for details.</p>	<p>These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update. Measures have been simplified in response to customers' request for measure simplification.</p>	Change	10.9.2.2

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
<p>PTCS & Prescriptive Duct Sealing – Single Family Homes Measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.</p>	These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.	Change	10.9.2.3
<p>PTCS & Prescriptive Duct Sealing – Manufactured Homes Measure savings and payments will change. See the October 2016 Measure Changes available in the Document Library for details.</p>	These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.	Change	10.9.2.3
<p>Line Voltage Thermostats - Single Family Measure savings and payment will change. See the October 2016 Measure Changes available in the Document Library for details.</p>	These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.	Change	10.10
<p>New ENERGY STAR Manufactured Homes Measure savings and payments will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.</p>	These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.	Change	10.11.1
<p>New High Performance Manufactured Homes Measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.</p>	These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.	Change	10.11.2
<p>New ENERGY STAR/Built Green Single-Family Homes (Oregon) Measure savings and payments will change. See the October 2016 Measure Changes available in the Document Library for details.</p>	These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.	Change	10.11.3
<p>New ENERGY STAR/Built Green Single-Family Homes (Washington) Measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.</p>	These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.	Change	10.11.3
<p>New ESTAR/Built Green Single Family Homes (Idaho and Montana) Measure for Idaho and Montana will expire.</p>	New ENERGY STAR Homes measures for Idaho and Montana are now equivalent to code and no longer supported by the RTF. NEEA is in the process developing a New Construction protocol for Idaho and Montana. In the meantime, customers may use the Montana House (ID/MT) or contact NEEA to be part of their New Standard Protocol pilot.	Change	10.11.3
<p>Montana House (ID/MT/NV/WY) Measure savings and payments will change. See the October 2016 Measure Changes available in the Document Library for details.</p>	The change in savings is a result of the 7th Plan UES update.	Change	10.11.4
<p>New ENERGY STAR Multifamily Construction Measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.</p>	The change in savings is a result of the 7th Plan UES update.	Change	10.11.5

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
The BPA Residential Weatherization Specifications and Best Practices Field Guide will be updated. A summary of changes to both documents (updated for 2016) is available in the Document Library.	Over the past two years, BPA staff have collected feedback from customers and other stakeholders to inform minor updates and corrections to the Specifications and the Field Guide. These updates were reviewed by a group of utility representatives.	Change	10.12
Insulation – Single Family Measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.	The change in savings is a result of the 7th Plan UES update.	Change	10.12.1
Insulation – Manufactured Homes Measure savings will change. See the October 2016 Measure Changes available in the Document Library for details.	These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.	Change	10.12.1
Insulation – Multifamily Homes Measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.	The change in savings is a result of the 7th Plan UES update.	Change	10.12.1
Prime Windows/Patio doors – Single Family Measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.	The change in savings is a result of the 7th Plan UES update.	Change	10.12.2
Prime Windows/Patio Doors – Manufactured Homes Measure savings will change. See the October 2016 Measure Changes available in the Document Library for details.	These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.	Change	10.12.2
Prime Windows/Patio Doors – Multifamily Homes Measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.	The change in savings is a result of the 7th Plan UES update.	Change	10.12.2
Insulated Exterior Doors – Single Family Measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.	The change in savings is a result of the 7th Plan UES update.	Change	10.12.3
Insulated Exterior Doors – Manufactured Measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.	These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.	Change	10.12.3
Whole House Air Sealing – Single Family Measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.	The change in savings is a result of the 7th Plan UES update.	Change	10.12.4
Whole House Air Sealing – Manufactured Measure savings and payments will change. See the October 2016 Measure Changes available in the Document Library for details.	The change in savings is a result of the 7th Plan UES update.	Change	10.12.4

DESCRIPTION	RATIONALE	CHANGE OR CORRECTION?	SECTION
<p>Prescriptive Air Sealing – Single Family Effective October 1, 2016 measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.</p>	The change in savings is a result of the 7th Plan UES update.	Change	10.12.5
<p>Low Income Weatherization All Low Income Weatherization measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.</p>	These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.	Change	10.12.6
<p>Low Income Weatherization The BPA Residential Weatherization Specifications and Best Practices Field Guide will be updated. A summary of changes to both documents (updated for 2016) is available in the Document Library.</p>	Over the past two years, BPA staff have collected feedback from customers and other stakeholders to inform minor updates and corrections to the Specifications and the Field Guide. These updates were reviewed by a group of utility representatives.	Change	10.12
<p>Low Income Ductless Heat Pumps All Low Income Ductless Heat Pump measure savings will change. There is no change to payment. See the October 2016 Measure Changes available in the Document Library for details.</p>	These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.	Change	10.12.6
<p>Low Income Duct Sealing All Low Income PTCS and Prescriptive Duct Sealing measure savings will change. Manufactured Homes Duct Sealing will increase to \$500. See the October 2016 Measure Changes available in the Document Library for details.</p>	These measures were updated by the RTF as a result of the SEEM calibration and the 7th Plan UES Update.	Change	10.12.6
<p>Low Income Duct Sealing The payment for Low Income PTCS and Prescriptive Duct Sealing measure cost is capped at \$500/unit.</p>	The Change Notice for this cap was inadvertently left out of a previous Implementation Manual.	Change	10.12.6
Utility Distribution Sector			
All RTF approved UES measures have been updated. Site and Busbar savings are now unique to each load shape, therefore savings per measure may increase or decrease as a result of these updates.	The RTF has updated all UES measures to incorporate the updated 7th Plan Cost Effectiveness Methodology and the updated ProCost modeling tool. Capacity benefits were added as well as new load shape data.	Change	11
Multi-Sector			
All RTF approved UES measures have been updated. Site and Busbar savings are now unique to each load shape, therefore savings per measure may increase or decrease as a result of these updates.	The RTF has updated all UES measures to incorporate the updated 7th Plan Cost Effectiveness Methodology and the updated ProCost modeling tool. Capacity benefits were added as well as new load shape data.	Change	12
<p>Commercial Clothes Washers – Multi-family The savings will change.</p>	This change is due to an RTF action.	Change: Savings up or down	12.3.8

Implementation Manual Revision Timeline

MILESTONE	OCTOBER 2016 DUE DATE [1]
Publish notice of changes to existing measures and list of new measures.	April 1, 2016
Publish draft IM for internal and external review.	May 15, 2016
All internal and external feedback due	June 5, 2016
Publish Implementation Manual	August 15, 2016
Implementation Manual Effective	October 1, 2016

[1] This column will be updated to reflect the dates of the upcoming publication. If the static due date falls on a weekend or holiday, the actual due date will be the following business day.