

2022 Change Notice

APRIL 1, 2022 CHANGE NOTICE SUMMARY

SECTION NUMBER	DESCRIPTION	RATIONALE
1.0	Introduction: BPA updated the introductory language to reflect the role of the IM as outlined in the ECA.	More clearly defines the role of the IM relative to the ECA.
1.7	BPA moved the COTR Request and Acknowledgement Procedure from the Multi Sector Section 12 to Section 1.7.	The procedure is referenced throughout the IM and is an administrative requirement that aligns well with Section 1.
2.0	BPA has made updates to formatting throughout the section to remove extraneous hyperlinks found within the section itself.	Funding: BPA removed extraneous hyperlinks found throughout this section.
2.1.1	BPA added Funding Terminology as a new subsection. This consolidates definitions for BPA funding terms which were previously located in the Definitions section or in other areas of Section 2. These terms includes: Available Implementation Budget, Bilateral Transfer, Initial Implementation Budget, Tier One Cost Allocation, and Unassigned Account.	Incorporates terms and definitions only used in Section 2 into one subsection, so they can be easily referenced
2.1.1.2	Bilateral Funding: BPA updated this section to reflect BEETS reporting and invoicing processes. This includes the removal of "eedocs@bpa.gov" as a method to submit reporting and invoicing-related documents.	Align with BEETS implementation plans.
2.1.1.2	BPA clarified Inter-Rate Period Budget Flexibility (Rollover) to reflect that customers may transfer up to 10% of their initial implementation budget from one rate period to the next or up to \$50,000 of their available implementation budget, whichever is greater.	Clarifies rollover amounts.
2.1.4	Performance Payments: BPA incorporated language associated with capping performance payments for shorter measure lives to reflect how BEETS is configured.	Align with BEETS implementation plans.
2.1.4	Performance Payments: BPA adjusted the language regarding Performance Payments from "BPA highly recommends that customers use performance payments..." to "BPA allows customers to claim performance payments..."	Reflects performance payment eligibility rather than subjective best practices.
2.1.4	Performance Payments: Effective April 1, 2022, the performance payment rate is now based on measure or project Completion Date.	Aligns the Performance Payment to when the measure was implemented.
2.1.4	With the implementation of BEETS, customers may now opt-in to receive performance payments during the invoicing process.	Align with BEETS implementation plans. In former reporting system, customers opted-out of performance payments.
2.2	Funding Sources and Savings Allocation: In the Funding Sources table, BPA updated the Implementation Budget description from "BPA payment in the form of EEI funding; ECA funded activities that are accepted by BPA" to "BPA payment in the form of EEI funding according to the terms of the ECA."	Previous language reflecting "ECA-funded activities" is inaccurate
3.2	BPA fully updated the Reporting Requirements section to reflect BEETS reporting requirements.	Aligns with BEETS implementation plans.

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3.2	Reporting Requirements: Non-Reportable now has a separate reporting methodology in BEETS for achieved energy savings.	Aligns with BEETS implementation.
3.3	BPA removed references to Evaluation from the Oversight section and now treat each as its own, separate section. Additionally BPA slightly updated language to reflect BEETS implementation.	Oversight and Evaluation will become each their own section in Section 3. For Oversight, language will be slightly updated to reflect BEETS implementation.
3.5	Third-Party Operated Programs: BPA updated this section to reflect current BPA third-party offerings.	Updated to reflect BPA offerings.
4.0	Custom Projects: BPA updated the language throughout section 4 to align with other IM sections and to clarify custom project requirements.	A number of instances have been identified throughout section 4 of inconsistent language and vague requirements. The update has made section 4 consistent with other IM requirements and has clarified custom project submittal requirements. It does not change option 1 or option 2 custom project requirements.
4.1	Custom Projects Payment Rate: BPA reformatted the table to show the measure incentives in a low-to-high rate per measure life.	Brings clarity to readers.
4.1	Custom Projects Payment Table: BPA increased the incentive rate for New Construction and Major Renovation for Utility Distribution sector measures with 20+ measure life to \$0.35 per kWh.	Brings consistency to incentive rates between the sectors (excluding Commercial HVAC).
4.2.1	Limited Availability Emerging Technology Field Test Projects: BPA retired Progress Payments and the Progress Payment Calculator effective April 1, 2022.	Aligns with BPA's timing for publishing the 2022-2023 Rate Period Implementation Manual.
4.2.1	Limited Availability Emerging Technology Field Test Projects: BPA moved this to the Custom Projects section from the former Multi-Sector section 12.3.3.	The former Section 12.3.3 Limited Availability Emerging Technology Field Test Projects has been moved to Section 4 due to the Multi-Sector section being eliminated. Test projects are a type of custom project and are required to be submitted as custom projects.
4.3.2	Custom Projects General Requirements: BPA added B/C ratio requirements specific to Utility Distribution measures; specifically savings exceeding 800,000kWh.	Improved and clarified the requirements for utility-owned system improvements.
4.3.2	Custom Project General Requirements: BPA moved the Simplified Voltage Optimization M&V Protocol and description to the Option 1 and Option 2 Custom Projects BPA M&V options available.	Brings clarity for utilities.
4.3.2	Upon implementation of BEETS, Option 2 custom projects must meet the following B/C ratio requirements: <ul style="list-style-type: none"> If the project savings are 200,000 kWh or less, no cost-effectiveness screen is applied. If the project savings are >200,00 kWh, the completed project must have a B/C ratio ≥ 0.5. BPA has removed the requirement of a minimum B/C ratio of 1.0 at the invoice level for custom projects.	The Option 2 rule requires a more complex and costly configuration to manage in BEETS.
5.0	Custom Programs: BPA reinstated Custom Programs as of April 1, 2022, with a revised process. The new process includes three required phases: 1. Prescreening, 2. Custom Program Proposal, and 3. Custom Program Completion. The new process also includes pre-determined documentation and submission requirements.	The addition of a prescreening phase and documentation requirements will streamline workflow and allow BPA to better meet customers needs.

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6.0	Introduction to the Sectors: BPA consolidated and moved the sector introduction/definitions to this new IM section as well as updated the language to provide additional clarity.	Clarified the language to provide increased certainty around measure applicability.
7.2	<p>Retroactive Change: Effective 10/01/2020</p> <ul style="list-style-type: none"> Removed the following sentences in the basis of energy savings section: <ul style="list-style-type: none"> Electric-resistance stock water tank heaters must be removed or permanently disabled. The new tank/fountain must be sized in accordance with manufacturer's specifications for the type and number of animals where it will be used. The water supply must be hard-piped underground and stubbed up into the insulated portion of the fountain Removed the following requirements: <ul style="list-style-type: none"> Opening completely sealed. Possess elliptical or flap closures that tip easily, so animals can drink without resistance Warranty requirement Changed "fully insulated foam or dead-air-space insulated" to "fully insulated" 	Current requirements for the product are no longer available in marketplace. Also, removal of applicable requirements better aligns with the RTF approved measure requirements.
7.6	Irrigation System Upgrades: BPA increased the savings and payments for the following offerings: Sprinkler Upgrade Irrigation System Conversion to MESA from high pressure Center Pivot or Lateral Move System Sprinkler Package Replacements LESA/LEPA/MDI Sprinkler Package Center Pivot or Lateral Move System Sprinkler Package Replacements MESA Sprinkler Package Center Pivot or Lateral Move System Sprinkler Package Replacements High Pressure Sprinkler Package Center Pivot or Lateral Move System Sprinkler Upgrade Irrigation System Conversion to LESA/LEPA/MDI from high pressure, Lateral Move or Center Pivot Systems.	At the March 16, 2021 RTF meeting, the RTF approved updates to the Irrigation Hardware UES measure savings justifying a higher incentive than was previously offered.
7.6.1	Irrigation System Conversion: LESA/LEPA/MDI: BPA removed the Irrigation System Conversion: LESA/LEPA/MDI Project Information Form (PIF) documentation requirement.	Data collection complete; form is no longer required
7.6.3	Irrigation System Conversion: High Pressure to Low Pressure: BPA renamed the measure "Irrigation System Conversion: MESA" to "Irrigation System Conversion: High Pressure to Low Pressure".	Updating the name of the section to encompass both the existing measure and the new measure added.
7.6.3	Irrigation System Conversion: High Pressure to Low Pressure: BPA added a new measure for a wheel line or hand line irrigation system or a portion of a system, converted from high pressure to low pressure operation.	In response to utility inquiries, BPA staff created a new qualified measure to allow the conversion of an existing wheel line or hand line irrigation system from a high-pressure impact sprinkler system to low-pressure sprinkler system, using low pressure regulators, replacing impact sprinklers with rotating type sprinklers, and new nozzles for the new low-pressure sprinklers. The resulting energy savings for this High-pressure conversion measure, whether on a center pivot or a wheel and hand line are similar.
7.6.4	Irrigation Hardware: BPA expired the following offerings: Gasket Replacement Replace Leaking Base Boot Gasket with New Gasket Center Pivot or Lateral Move System Gasket Replacement Replace Tower/Span/Pivot-Flex Gasket Center Pivot or Lateral Move System Pipe Repair Repair Leaking Pipes Wheel-line, Hand-line, or Portable Main-Line System; Sprinkler Replacements Upgrade Low Pressure Sprinklers to Rotating Type Sprinklers Center Pivot or Lateral Move System Sprinkler Replacements Upgrade Impact Sprinkler to Rotating Type Sprinkler Wheel-lines, Hand-lines, Center Pivots or Lateral Move systems	Deactivated by the RTF at the March 16, 2021 RTF meeting.

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7.6.4	Irrigation Hardware Upgrades: BPA decreased the savings and payments for the following offering: Hub Replacement Replace Thunderbird Wheel Line Hubs Wheel Line System.	At the March 16, 2021 RTF meeting, the RTF approved updates to the Irrigation Hardware UES measure savings effectively decreasing the incentive previously offered.
7.7.2	THIS CHANGE ALSO AFFECTS 7.7.3 AND 7.7.4 The change is to expand the eligible HP range for the VFD for Pumps UES measure from 20hp, down to 7.5 hp, and raise the upper end from 500hp to 1000hp.	The change would expand application of existing VFD/ Pump measures in a time of expiring sprinkler hardware measures and saturation of the existing VFD/pump market under the current horse power range. Furthermore, we felt the UES measure change would allow both small and larger farms to easily access the UES measures and would help meet our kWh and access/equity goals. It would also increase marketability of the program to the irrigators and trade allies.
8.3	Nonresidential Lighting: BPA added an additional method to calculate incremental cost for commercial new construction projects. Customers now may choose to use 2.86% of the total construction project cost.	Aligns with Custom Project requirements and improves the ease of implementation.
8.3	Nonresidential Lighting: BPA removed Lighting Calculator 4.0 and 5.0 from the Effective Date/Retirement Date table and Lighting Calculator 4 series from the Payment table.	BPA retired Lighting Calculators 4.0 and 5.0.
8.4.1	Advanced Rooftop Unit Controls: BPA removed the Project Information Form (PIF) documentation requirement for this measure. Required project information is now entered directly into BEETS or via the UES measures upload template.	Required information is captured in BEETS.
8.4.2	Connected Thermostat: BPA removed the Project Information Form (PIF) documentation requirement for this measure. Required project information is now entered directly into BEETS or via the UES measures upload template.	Required information is captured in BEETS.
8.4.3	Ductless Heat Pump (DHP) Retrofit and Upgrade (BPA-Qualified): BPA added the AHRI Certificate as a documentation requirement and removed it from the DHP Qualified Product List.	Improved consistency with other Commercial heat pump measures. DHP efficiency requirements are listed in section 8.4.3.
8.4.3	Ductless Heat Pump (DHP) Retrofit and Upgrade (BPA-Qualified): BPA removed the Project Information Form (PIF) documentation requirement for this measure. Required project information is now entered directly into BEETS or via the UES measure upload template.	Required information is captured in BEETS.
8.4.3	Ductless Heat Pump (DHP) Retrofit and Upgrade (BPA-Qualified): BPA updated the DHP Upgrade pre-conditions to allow for the space to be conditioned by an operational or failed air-source heat pump.	Expanded the preconditions to account for the air-source heat pump baseline.
8.4.4	Air-Source Heat Pump Retrofit and Upgrade (BPA-Qualified). Removed the Project Information Form (PIF) documentation requirement. Required project information is captured via the BPA Energy Efficiency Tracking System (BEETS) or UES measure BEETS upload template.	Required information is captured in BEETS.
8.4.4	Air-Source Heat Pump Upgrade and Retrofit (BPA-Qualified): BPA provided clarification language within the "Requirements and Specifications" section.	Improved clarity.
8.4.4	Variable Refrigerant Flow System Retrofit (BPA-Qualified): The efficiency requirements have been updated.	An error was found in the measure analysis.

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8.4.5	Variable Refrigerant Flow Systems (BPA-Qualified): BPA removed the Project Information Form (PIF) documentation requirement for this measure. Required project information is now entered directly into BEETS or via the UES measure upload template.	Required information is captured in BEETS.
8.4.6	Variable Frequency Drive on Air Handling Unit Fan (BPA-Qualified): BPA removed the Project Information Form (PIF) documentation requirement for this measure. Required project information is now entered directly into BEETS or via the UES measure upload template.	Required information is captured in BEETS.
8.5.1	Commercial Insulation: BPA updated the preconditions to clarify that the building's primary heating system must be electric.	Improved clarity
8.5.1	Commercial Insulation: BPA removed the Project Information Form (PIF) documentation requirement for this measure. Required project information will be entered directly into BEETS or via the UES measure upload template.	Required information is captured in BEETS.
8.5.1	Commercial Insulation: BPA updated the energy savings. See UES Measure List for specific changes. There were no changes to incentive levels.	Updated to be consistent with the Regional Technical Forum's revised savings.
8.5.2	Commercial Windows (BPA-Qualified): BPA removed the Project Information Form (PIF) documentation requirement for this measure. Required project information will be entered directly into BEETS or via the UES measure upload template.	Required information is captured in BEETS.
8.5.2	Commercial Windows (BPA-Qualified): BPA updated preconditions to clarify that the building's primary heating source must be electric.	Improved clarity.
8.6.1	Anti-Sweat Heater (ASH) Controls: BPA updated the energy savings. See UES Measure List for specific changes. There were no changes to incentive levels.	Updated to be consistent with the Regional Technical Forum's revised savings.
8.6.2	Efficient Refrigeration Evaporator Fan Motors: BPA updated the measure name and post-condition requirements to allow payments for Permanent Magnetic Synchronous Motors. Electronically Commutated Motors are still eligible. There was no change to payment levels.	Expanded this measure to provide additional opportunities for uptake.
8.6.2	Efficient Refrigeration Evaporator Fan Motors: BPA updated the energy savings. See UES Measure List for specific changes. There were no changes to incentive levels.	Updated energy savings.
8.6.3	Strip Curtains for Walk-in Coolers and Freezers: BPA updated the energy savings. See UES Measure List for specific changes. There were no changes to incentive levels.	Updated to be consistent with the Regional Technical Forum's revised savings.
8.7	Commercial Kitchen and Food Service Equipment: Commercial Electric Fryers: BPA retired this measure on March 31, 2022 (previously section 8.7.6)	The Regional Technical Forum updates to this measure left limited opportunity for uptake.

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8.7.1	Demand Controlled Kitchen Ventilation (BPA-Qualified): BPA removed the Project Information Form (PIF) documentation requirement for this measure. Required project information will be entered directly into BEETS or via the UES measure upload template.	Required information is captured in BEETS.
8.7.2	Commercial Steam Cookers: BPA updated the energy savings. See UES Measure List for specific changes. There were no changes to incentive levels.	Updated to be consistent with the Regional Technical Forum's revised savings.
8.7.2	Commercial Steam Cookers: BPA updated the date after which it will accept pre-existing models that were ENERGY STAR-Certified at the time they were manufactured. This date changed from October 2019 to April 2022.	Updated to align with the release of the April 2022 IM.
8.7.3	Hot Food Holding Cabinets: BPA updated the energy savings. See UES Measure List for specific changes. There were no changes to incentive levels.	Updated to be consistent with the Regional Technical Forum's revised savings.
8.7.3	Hot Food Holding Cabinets: BPA updated the date after which it will accept pre-existing models that were ENERGY STAR-Certified at the time they were manufactured. This date changed from October 2019 to April 2022.	Updated to align with the release of the April 2022 IM.
8.7.4	Electric Combination Ovens: BPA updated the energy savings. See UES Measure List for specific changes. There were no changes to incentive levels.	Updated to be consistent with the Regional Technical Forum's revised savings.
8.7.4	Electric Combination Ovens: BPA updated the date after which it will accept pre-existing models that were ENERGY STAR-Certified at the time they were manufactured. This date changed from October 2019 to April 2022.	Updated to align with the release of the April 2022 IM.
8.7.5	Electric Convection Ovens: BPA updated the date after which it will accept pre-existing models that were ENERGY STAR-Certified at the time they were manufactured. This date changed from October 2019 to April 2022.	Updated to align with the release of the April 2022 IM.
8.7.5	Electric Convection Ovens: BPA updated the ENERGY STAR-Certification requirement from a minimum of version 2.2 to a minimum of version 3.0.	Updated to be consistent with the Regional Technical Forum.
8.7.5	Electric Convection Ovens: BAP updated the energy savings. See UES Measure List for specific changes. There were no changes to incentive levels.	Updated to be consistent with the Regional Technical Forum's revised savings.
8.7.6	Pre-Rinse Spray Valves: BPA updated the energy savings. See UES Measure List for specific changes. There were no changes to incentive levels.	Updated to be consistent with the Regional Technical Forum's revised savings.
8.8	Additional UES Offerings - Commercial Showerheads: BPA retired this measure. (previously 7.8.3)	This measure was deactivated by the Regional Technical Forum. Removed for consistency.
8.8.1	Generator Block Heaters (BPA-Qualified): BPA removed the Project Information Form (PIF) documentation requirement for this measure. Required project information will be entered directly into BEETS or via the UES measure BEETS upload template.	Required information is captured in BEETS.
8.8.3	Vehicle Engine Block Heater Controls: BPA updated the energy savings. See UES Measure List for specific changes. There were no changes to incentive levels.	Updated to be consistent with the Regional Technical Forum's revised savings.

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8.8.4	Commercial Heat Pump Water Heaters: BPA removed language regarding the option to use the Residential Sector 10.5.4 Unitary Heat Pump Water Heater and 10.5.5 Split-System Heat Pump Water Heater measures for Commercial installations through March 31, 2022.	As of April 1, 2022, HPWHs installed in Commercial applications must use the Commercial Heat Pump Water Heater measure.
8.8.5	Commercial Clothes Washers: BPA updated the date after which it will accept pre-existing models that were ENERGY STAR-Certified at the time they were manufactured. This date changed from October 2019 to April 2022.	Updated to align with the release of the April 2022 IM.
10.0	Energy Management: Energy Project Manager (Optional ESI component): BPA retired this offering and the Energy Project Manager Calculator, effective March 31, 2022.	Retired the measure to allow for a comprehensive overhaul.
10.0	Strategic Energy Management: SEM Projects (Optional ESI component): BPA retired this measure and the Strategic Energy Management Calculator effective March 31, 2022.	Retired the measure to allow for a comprehensive overhaul.
10.3.2	Strategic Energy Management: BPA added a new measure applicable in both Commercial and Industrial sectors. The new SEM performance period begins on April 1, 2022 or later, unless participant is actively enrolled in SEM Projects (Optional ESI Component) as of March 31, 2022. The incentive payment is \$0.025 per kWh of SEM Verified Savings.	Simplified and enhanced the measure.
10.3.3	Performance Tracking System: BPA added a new measure to overcome electric-energy data collection barriers for commercial and industrial sector participants currently enrolled in SEM engagements. Incentive payments for PTS initial installation: is the lesser of PTS costs or \$15,000; and, PTS maintenance: is the lesser of PTS costs or \$10,000 per two-year performance period.	Simplified and enhanced the measure.
10.7.1.1	Ductless Heat Pumps are no longer be available in new residential single family applications.	The RTF no longer supports Ductless Heat Pumps in new construction
10.9	Green Motors: BPA moved Green Motors to the Industrial Sector section.	The majority of energy savings is industrial and aligns the initiative with other measures that apply to multiple sectors.
11.0	BPA removed all Simple Steps language from section 11.	The Simple Steps program ended.
11.2	Residential Lighting: BPA moved the RBSA room table from the "Requirements and Specifications" section and added it to the "Additional Information" section for LED Lamps/ Fixtures and TLEDs	Room type is no longer a specification, but implementation guidance.
11.2.1	Residential Lighting: BPA changed savings and payments for Residential Lighting. Most savings decreased with a few increasing. Payments all either decreased or stayed the same.	The savings and payments have been updated due to RTF savings and incremental cost changes.
11.2.1	Residential Lighting: BPA eliminated the retail delivery channel for both LED lamps and LED fixtures.	WA - Due to newly adopted lighting standards in Washington, the baseline is the efficient case. OR/ID/MT - As a result of the updated RTF savings, key lamps in the retail portfolio no longer have an incremental cost. As a result the retail delivery channel is no longer feasible.
11.2.1	Residential Lighting: BPA eliminated the Mailed Non-Request delivery channel for both LED lamps and LED fixtures.	The RTF no longer supports the offering.

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11.2.1	Residential Lighting: BPA removed LED fixture offerings from the Direct Install delivery channel.	As a result of the updated RTF savings, BPA found the measures no longer cost effective
11.2.1	Residential Lighting: BPA eliminated By Request LED Bulbs for the state of Washington.	Due to newly adopted lighting standards in Washington, the baseline is the efficient case for LED bulbs - they will be omitted from the By Request offering in Washington state.
11.2.2	Residential Lighting: BPA eliminated the retail delivery channel for TLEDs.	As a result of the updated RTF savings, BPA found the measures no longer a viable option for retail programs.
11.3	Residential Advanced Power Strips: BPA removed the "Advanced Power Strips — Infrared Sensing (Home Entertainment Centers)" and "Advanced Power Strips — PC Interaction Sensing (Personal Desktop Computers)" offerings.	As a result of the updated RTF savings, BPA found the measures no longer cost effective.
11.3.1	Residential Advanced Power Strips: BPA moved the Home Entertainment application from the "Requirements and Specifications" section and added it to the "Additional Information" section.	Installation location is no longer a specification, but implementation guidance.
11.3.1	Residential Advanced Power Strips: BPA reduced By Request payments for residential advanced power strips.	Align payments with the current value of the energy savings.
11.3.2	Energy Saver Kits: BPA deactivated Energy Saver Kits and replaced them with new measures, changing the savings and payments.	Kit component measures are no longer RTF approved; new kits developed.
11.3.2	Residential Energy Saver Kits: BPA omitted kit configuration offerings that include LED bulbs available for the state of Washington as they are no longer eligible.	Due to newly adopted lighting standards in Washington, the baseline is the efficient case for LED bulbs - they have been omitted from kits available in Washington State.
11.4	Residential Appliances: BPA removed the verbiage "and top loaders must be rated CEE Tier 1 or above." from the Requirements and Specifications section.	BPA is offering a separate measure for ENERGY STAR rated top loading clothes washers.
11.4	Residential Appliances: BPA removed all CEE Tier Clothes Washer Measures.	Deactivated by the RTF; Only ENERGY STAR products are supported
11.4	Residential Appliances: BPA removed the "By Request" and "Direct Install" delivery channels.	BPA does not offer measures for By Request or Direct Install appliances
11.4	Residential Appliances: BPA changed clothes washer payments. Some increased while others decreased. See measure list for details. BPA also leveled payments by load configuration.	Updated RTF information and BPA Q analysis allowed for updated payment information.
11.5	The 'By Request' delivery channel has been added to the EV Charger offering.	Allows utilities to submit sales from online portals.
11.5.1	Residential Electric Vehicle Chargers: BPA decreased the savings for Level 2 EV chargers.	The savings are being updated due to RTF savings changes.
11.5.1	Residential Electric Vehicle Chargers: EV chargers have a Qualified Products List in the IM document library instead of linking to the Energy Star website list.	Energy Star frequently changes the product specification outside of the BPA IM rate period.
11.6	Unitary HPWH and Split-System HPWH: BPA moved the text requiring Heat Pump Water Heaters (unitary and split) to be on the Qualified Products List from Basis for Energy Savings to Requirements and Specifications	Not currently a requirement due to incorrect location. Moved to the correct location.
11.6.1	Residential Showerheads: BPA removed Section 10.5.1 Showerheads as the measure has expired.	Deactivated by the RTF

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11.6.1	Residential Showerheads: BPA removed combination TSV and showerheads measures. BPA still allows combination units in the TSV measures, but savings and payments are based on the TSV savings only.	Deactivated by the RTF.
11.6.1	Residential Thermostatic Shut-Off Valves (TSV): BPA decreased the savings for stand alone TSVs.	The savings are being updated due to RTF savings changes.
11.6.1	Residential Thermostatic Shut-Off Valves: BPA updated fuel source documentation to include the absence of natural gas within a service territory to claim electric measures without verification of fuel type.	Updating for continuity with other sections of the IM that have the same requirement
11.6.1	Residential Thermostatic Shut-Off Valves (TSV): BPA reduced By Request payments for Residential Thermostatic Shut-Off Valves (TSV).	Align payments with the current value of the energy savings.
11.6.2	Unitary Heat Pump Water Heater - 50 gallons and above: BPA changed the HPWH measure name to now include the "50 gallons and above" qualifier.	Structural change due to introduction of 40 gallon HPWH measure
11.6.2	Unitary Heat Pump Water Heater - 40 gallon: BPA created a new measure for 40 gallon unitary HPWH units, no longer allowing them to be claimed on the 50 gallon measure, formerly used for any size HPWH.	Accuracy in savings reporting
11.6.3	Residential Aerators: BPA removed Section 10.5.3 Aerators as the measure has expired.	Deactivated by the RTF
11.6.3	Unitary Heat Pump Water Heater - 50 gallon and above: BPA changed the savings on unitary HPWHs, with some savings increasing and some decreasing.	Updated savings from the RTF
11.6.3	Unitary Heat Pump Water Heater - 50 gallons and above: Unitary HPWH measures are no longer eligible for new construction.	The RTF has not approved HPWHs for new construction
11.6.3	Unitary Heat Pump Water Heater - 50 gallons and above: Unitary HPWH measures are now eligible for multifamily housing.	The RTF measures allow for multifamily housing
11.6.3	Unitary Heat Pump Water Heater - 50 gallon and above: BPA deleted language regarding one-to-one replacement for unitary HPWHs.	This requirement is covered by the "A maximum of one Unitary HPWH measure may be claimed per home. Accessory dwelling units with separate plumbing systems qualify for this measure even if they are on the same electrical meter." language
11.6.3	Unitary Heat Pump Water Heater - 50 gallons and above: Unitary Tier 1-3 heat pump water heater measures no longer have state-level measure identifiers in the measure list.	Not needed now that new construction is not eligible
11.6.3	Unitary Heat Pump Water Heater - 50 gallons and above: BPA moved the text requiring a HPWH unit be on the Qualified Products List from "Basis of Energy Savings" to "Requirements and Specifications".	Clarify this is a requirement.
11.6.3	Unitary HPWH - 50 gallon and above: Commercial Heat Pump Water Heater installations are no longer eligible for reporting using Residential Unitary measures.	The new Commercial Heat Pump Water Heater measures may be used (sec. 8.8.4).
11.6.4	Split system Heat Pump Water Heater: Split system HPWH measures are now eligible for multifamily housing.	The RTF measures allow for multifamily housing

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11.6.4	Split System Heat Pump Water Heater: BPA moved the detailed qualifications for split system water heaters from "Basis for Energy Savings" to "Additional Information".	These items are manufacturer recommendations rather than BPA requirements.
11.6.4	Split-System HPWH: Commercial Heat Pump Water Heater installations are no longer eligible for reporting using Residential Split system measures.	The new Commercial Heat Pump Water Heater measures may be used (see sec 8.8.3)
11.7.1.1	Ductless Heat Pumps: BPA no longer maintains a Qualified Products List (QPL) for ductless heat pumps. BPA requires not only that Ductless Heat Pumps be certified by the Air-Conditioning, Heating, & Refrigeration Institute (AHRI) as meeting our specification but also that the customer file contains a copy of the AHRI certificate.	Program simplification
11.7.1.1	Ductless Heat Pumps: BPA decreased the savings for Ductless Heat Pumps in zonal single family and manufactured homes.	Savings updated due to RTF savings changes
11.7.1.1	Ductless Heat Pump: BPA removed the Ductless Heat Pump Project Information Form (PIF) documentation requirement. The make, model and manufacturer must now be entered into BEETS.	Program simplification
11.7.2	HVAC Performance Tested Comfort Systems (PTCS) - PTCS Specifications redesigned: BPA made numerous changes to update program specifications for Air Source Heat Pumps, VSHPs, GSHPs, and PTCS Duct Sealing and Prescriptive Duct Sealing. For more information see the PTCS Change Notice Summary .	A regional PTCS Workgroup reviewed the program and worked to update numerous specifications to streamline and improve the program.
11.7.2	HVAC Performance Tested Comfort Systems (PTCS): BPA made multiple changes to PTCS participation requirements that were not reflected in the Implementation Manual language. For more information see the PTCS Change Notice Summary .	A regional PTCS Workgroup reviewed the program and worked to update several requirements to streamline and improve the program.
11.7.2.1	PTCS Air Source Heat Pumps: BPA renamed the PTCS ASHP Form to "PTCS ASHP optional data collection tool", removed it from Required Documentation, and listed it as optional under Additional Information.	All PTCS forms are optional and only used for data collection purposes.
11.7.2.1	PTCS Air Source Heat Pumps: The kWh savings decreased per the RTF. There was no change to payments.	RTF changed the kWh savings.
11.7.2.1	PTCS Air Source Heat Pumps: BPA changed the section header to add the term: "(BPA-qualified)."	Measure changed from RTF to BPA-Qualified basis.
11.7.2.1	PTCS Air Source Heat Pumps: BPA removed the Documentation Requirement to store the following installation and sizing information in Customer File and instead listed it as optional under Additional Information: <ul style="list-style-type: none"> PTCS Air Source Heat Pump Form (handwritten form located in the IM Document Library); or CheckMe!® Heat Pump Protocol Data Entry Form for PTCS Summer and Winter and PTCS Heat Pump and Central Air Conditioner Sizing Calculator available in the IM Document Library, or; A heat load/heat loss calculation and associated balance point worksheet (i.e. a calculator, graph, or chart) 	To streamline recordkeeping requirements.

SECTION NUMBER	DESCRIPTION	RATIONALE
11.7.2.1	PTCS Air Source Heat Pumps: BPA removed the following Documentation Requirements from Documentation Requirements Table and removed the associated check mark in Customer File - A) "Documentation that measure requirements have been met (manufacturer, model number, type, size, quantity of equipment of product installed or used)", B) "Proof that the required forms for the claimed measures have been accepted in the PTCS Site Registry of certified systems", and C) "Registry Installation Report."	To remove duplicative recordkeeping requirements by eliminating required documents from Customer File, as requested in East HUB Roundtable. The Registry already captures and stores this information, which can be accessed electronically from the Registry using the Measure ID.
11.7.2.1	PTCS Air Source Heat Pumps: In Documentation Requirements table, BPA replaced reference to "PTCS Site Registry Measure ID" with "PTCS Site Registry Measure ID reflecting 'BPA Approved' status", and check marked the boxes for BEETS, and Site Registry.	For PTCS measures to be claimed, we require the PTCS Site Registry Measure ID show 'BPA-Approved' status, which reflects full compliance with PTCS specifications.
11.7.2.2	PTCS Variable Speed Air Source Heat Pumps: BPA renamed the PTCS ASHP Form to "PTCS ASHP optional data collection tool", removed it from Required Documentation, and listed it as optional under Additional Information.	All PTCS forms are optional and only used for data collection purposes.
11.7.2.2	PTCS Variable Speed Air Source Heat Pumps: The kWh savings decreased per the RTF. There was no change to payments.	RTF changed the kWh savings.
11.7.2.2	PTCS Variable Speed Air Source Heat Pumps: BPA changed the section header to add the term: "(BPA-qualified)."	Measure changed from RTF to BPA-Qualified basis.
11.7.2.2	PTCS Variable Speed Air Source Heat Pumps: BPA removed the Documentation Requirement to store the following installation and sizing information in Customer File and instead listed it as optional under Additional Information: <ul style="list-style-type: none"> PTCS Air Source Heat Pump Form (handwritten form located in the IM Document Library); or CheckMe!® Heat Pump Protocol Data Entry Form for PTCS Summer and Winter and PTCS Heat Pump and Central Air Conditioner Sizing Calculator available in the IM Document Library, or; A heat load/heat loss calculation and associated balance point worksheet (i.e. a calculator, graph, or chart) 	To streamline recordkeeping requirements.
11.7.2.2	PTCS Variable Speed Air Source Heat Pumps: In Documentation Requirements table, BPA replaced reference to "PTCS Site Registry Measure ID" with "PTCS Site Registry Measure ID reflecting 'BPA Approved' status", and check marked the boxes for BEETS, and Site Registry.	For PTCS measures to be claimed, we require the PTCS Site Registry Measure ID show 'BPA-Approved' status, which reflects full compliance with PTCS specifications.
11.7.2.2	PTCS Variable Speed Air Source Heat Pumps: BPA removed the following Documentation Requirements from Documentation Requirements Table and removed the associated check mark in Customer File - A) "Documentation that measure requirements have been met (manufacturer, model number, type, size, quantity of equipment of product installed or used)", B) "Proof that the required forms for the claimed measures have been accepted in the PTCS Site Registry of certified systems", and C) "Registry Installation Report."	To remove duplicative recordkeeping requirements by eliminating required documents from Customer File, as requested in East HUB Roundtable. The Registry already captures and stores this information, which can be accessed electronically from the Registry using the Measure ID.

SECTION NUMBER	DESCRIPTION	RATIONALE
11.7.2.3	PTCS Commissioning Controls and Sizing measure: BPA renamed the PTCS ASHP Form to ""PTCS ASHP optional data collection tool"", removed it from Required Documentation, and listed it as optional under Additional Information.	All PTCS forms are optional and only used for data collection purposes.
11.7.2.3	PTCS Commissioning Controls and Sizing measure: BPA changed the section header to add the term: "(BPA-qualified)."	Measure changed from RTF to BPA-Qualified basis.
11.7.2.3	PTCS Commissioning Controls and Sizing Measure: BPA removed the Documentation Requirement to store the following installation and sizing information in Customer File and instead listed it as optional under Additional Information: <ul style="list-style-type: none"> PTCS Air Source Heat Pump Form (handwritten form located in the IM Document Library); or CheckMe!® Heat Pump Protocol Data Entry Form for PTCS Summer and Winter and PTCS Heat Pump and Central Air Conditioner Sizing Calculator available in the IM Document Library, or; A heat load/heat loss calculation and associated balance point worksheet (i.e. a calculator, graph, or chart) 	To Streamline recordkeeping requirements.
11.7.2.3	PTCS Commissioning, Controls & Sizing measure (CC&S): In Documentation Requirements table, BPA replaced reference to "PTCS Site Registry Measure ID" with "PTCS Site Registry Measure ID reflecting 'PTCS Certified Only' status", and check marked the boxes for BEETS, and Site Registry.	For PTCS measures to be claimed, we require the PTCS Site Registry Measure ID show 'BPA-Approved' status, which reflects full compliance with PTCS specifications.
11.7.2.3	PTCS Commissioning Controls and Sizing measure (CC&S): BPA removed the following Documentation Requirements from Documentation Requirements Table and removed the associated check mark in Customer File - A) "Documentation that measure requirements have been met (manufacturer, model number, type, size, quantity of equipment of product installed or used)", B) "Proof that the required forms for the claimed measures have been accepted in the PTCS Site Registry of certified systems", and C) "Registry Installation Report."	To remove duplicative recordkeeping requirements by eliminating required documents from Customer File, as requested in East HUB Roundtable. The Registry already captures and stores this information, which can be accessed electronically from the Registry using the Measure ID.
11.7.2.4	PTCS Ground Source Heat Pumps: BPA renamed the PTCS ASHP Form to ""PTCS ASHP optional data collection tool"", removed it from Required Documentation, and listed it as optional under Additional Information.	All PTCS forms are optional and only used for data collection purposes.
11.7.2.4	PTCS Ground Source Heat Pumps: The kWh savings decreased per the RTF. There was no change to payments.	RTF changed the kWh savings.
11.7.2.4	PTCS Ground Source Heat Pumps: BPA changed the section header to add the term: "(BPA-qualified)."	Measure changed from RTF to BPA-Qualified basis.
11.7.2.4	PTCS Ground Source Heat Pumps: BPA combined PTCS Ground Water Source Open Loop Installation Specifications and Regional Technical Forum Residential Ground Source Heat Pump System Installation Standards into one spec. It also updated the form to accommodate this change and removed unused checklists from the form.	Streamlined and shortened documents as per PTCS Redesign.

SECTION NUMBER	DESCRIPTION	RATIONALE
11.7.2.4	PTCS Ground Source Heat Pumps: BPA removed the Documentation Requirement to store the following sizing information in Customer File and instead listed it as optional under Additional Information: <ul style="list-style-type: none"> Heat load/heat loss calculation; and Balance point worksheet (i.e. a calculator, graph or chart); and Loop-design documentation 	To streamline and simplify recordkeeping requirements.
11.7.2.4	PTCS Ground Source Heat Pumps: In Documentation Requirements table, BPA replaced reference to "PTCS Site Registry Measure ID" with "PTCS Site Registry Measure ID reflecting 'BPA Approved' status", and check marked the boxes for BEETS, and Site Registry.	For PTCS measures to be claimed, we require the PTCS Site Registry Measure ID show 'BPA-Approved' status, which reflects full compliance with PTCS specifications.
11.7.2.4	PTCS Ground Source Heat Pumps: BPA removed the following Documentation Requirements from Documentation Requirements Table and removed the associated check mark in Customer File - A) "Documentation that measure requirements have been met (manufacturer, model number, type, size, quantity of equipment of product installed or used)", B) "Proof that the required forms for the claimed measures have been accepted in the PTCS Site Registry of certified systems", and C) "Registry Installation Report."	To remove duplicative recordkeeping requirements by eliminating required documents from Customer File, as requested in East HUB Roundtable. The Registry already captures and stores this information, which can be accessed electronically from the Registry using the Measure ID.
11.7.2.5	PTCS Duct Sealing: BPA renamed the PTCS Duct Sealing Form to "PTCS Duct Sealing optional data collection tool", removed it from Required Documentation, and listed it as optional under Additional Information.	All PTCS forms are optional and only used for data collection purposes.
11.7.2.5	PTCS Duct Sealing - Previously Sealed Ducts: BPA now allows the resealing of ducts at utility discretion (i.e. a second duct sealing only), provided all other program requirements are met.	Additional flexibility was requested by utilities and COTRs.
11.7.2.5	PTCS Duct Sealing: In Documentation Requirements table, BPA replaced reference to "PTCS Site Registry Measure ID" with "PTCS Site Registry Measure ID reflecting 'BPA Approved' status", and check marked the boxes for BEETS, and Site Registry.	For PTCS measures to be claimed, we require the PTCS Site Registry Measure ID show 'BPA-Approved' status, which reflects full compliance with PTCS specifications.
11.7.2.5	PTCS Duct Sealing: BPA removed the following Documentation Requirements from Documentation Requirements Table and removed the associated check mark in Customer File - A) "Proof that the required forms for the claimed measures have been accepted in the PTCS Site Registry of certified systems", and B) "Registry Installation Report."	To remove duplicative recordkeeping requirements by eliminating required documents from Customer File, as requested in East HUB Roundtable. The Registry already captures and stores this information, which can be accessed electronically from the Registry using the Measure ID.
11.7.3	Prescriptive Duct Sealing: BPA changed the section header to add the term: "(BPA-qualified)."	Prescriptive Duct Sealing was always BPA-Qualified, but this was not noted in the IM, so we added that clarification in the section header.
11.7.3	Prescriptive Duct Sealing - Previously Sealed Ducts: Resealing of ducts is allowed at utility discretion (i.e. a second duct sealing only), provided all other program requirements are met.	Additional flexibility was requested by utilities and COTRs.

SECTION NUMBER	DESCRIPTION	RATIONALE
11.7.3	Prescriptive Duct Sealing: BPA removed the "Registry Installation Report" from the Documentation Requirements Table - Customer File, and replaced the requirement with the following: "Installation Information, including one of the following: 1) "Site Registry Measure ID reflecting 'BPA-Approved' status" (if the job was entered into the PTCS Site Registry; NOTE - check mark only BEETS and Site Registry boxes), or 2) Prescriptive Duct Sealing form (if job was not entered into Registry, or if the form supports a pre-approved utility certification program that does not utilize the Registry; NOTE: check mark only the Customer File box)."	To further streamline requirements, and better clarify what is needed in Customer File regardless of whether the Registry is used, or the Prescriptive Duct Sealing form is used.
11.7.3	Prescriptive Duct Sealing: Primary Heating System Type was added as a new requirement listed in the Documentation Requirements table, and check marked in BEETS column only.	To improve data collection for purpose of assisting future evaluation of measure cost effectiveness.
11.8.1	Line Voltage Thermostats: BPA increased the savings for Line Voltage Thermostats in Single and Multifamily homes with no change to payment."	RTF Update.
11.8.2	Advanced Smart Thermostats: BPA removed the Advanced Smart Thermostats Project Information Form (PIF) documentation requirement. The thermostat make and model must now be entered into BEETS.	Simplification.
11.8.2	Advanced Smart Thermostats: BPA increased payments for Advanced Smart Thermostats to \$140 for Retail, By Request, Coupon/Instant Discount and Standard Rebate and to \$165 for Direct Install.	Additional implementation support.
11.9.1	Northwest Energy Efficient Manufactured Home (NEEM): BPA decreased savings for NEEM measures.	RTF measure update.
11.9.2	Deleted "Stand-alone measures may not be claimed in addition to NEEM 1.1 or 2.0 with the exception of high efficiency heating and thermostat measures" from Additional Information.	Correcting a contradiction
11.9.4	Montana House: BPA is providing advanced notice that the Montana House measure will no longer be available beginning October 1, 2023 to ensure that utilities are aware the projects permitted prior to that date but not completed until afterward will not be eligible for payment.	The RTF no longer supports this measure.
11.9.4	Deleting "Stand-alone measures may not be claimed in addition to the Single Family New Construction Performance Path or Montana House" from Additional Information	Correcting a contradiction
11.9.5	BPA Energy Efficient New Multifamily Construction: BPA no longer allows custom projects for new multifamily construction.	Calculating the savings above code requires highly complex and specialized energy models to verify what the savings are above code. BPA does not have the resources to do this, we rely on the third party implementation programs referenced in the UES measures to perform this modeling and determine the code trade-offs utilized.
11.9.6	BPA Zero Energy Ready New Multifamily Construction: BPA does not allow custom projects for new multifamily construction.	Calculating the savings above code requires highly complex and specialized energy models to verify what the savings are above code. BPA does not have the resources to do this, we rely on the third party implementation programs referenced in the UES measures to perform this modeling and determine the code trade-offs utilized.

SECTION NUMBER	DESCRIPTION	RATIONALE
11.10	Weatherization: When claiming an "Any Electric Heat" option for Residential Weatherization measures, BPA requires that the primary heating type be reported. This excludes Whole House and Prescriptive Air Sealing.	Change was made to align with BEETS and IM reporting requirements.
11.10	Weatherization: BPA changed the savings for many single family, manufactured home, and some multifamily weatherization measures, including air sealing, insulation, prime windows, and storm windows. No change to incentive levels. See UES Measure list for specific changes.	Changes were made to be consistent with the RTF.
11.10	Weatherization: BPA updated this section name from Weatherization (Standard Income) to just Weatherization.	Changed the section title since Low-Income measures moved into a stand-alone section.
11.10.1	Insulation: BPA corrected the language that the sloped surface of an A-frame home must be insulated and invoiced per Weatherization Specification section 4.7: Sloped Roofs and Finished Attics.	Correcting language to align with current Weatherization Specifications.
11.10.1	Insulation: BPA clarified that knee walls should be invoiced as wall insulation and not attic insulation per Weatherization Specification section 8: Wall Insulation: Site Built Homes.	Clarification was made to reflect current weatherization specifications.
11.10.1	Insulation: BPA clarified that manufactured roof insulation with blown-in attic and rigid insulation covered by an EPDM roof can be claimed as one roof insulation measure and be based on total insulation value.	Clarification made to reflect current weatherization specifications.
11.10.1	Insulation: BPA expired the measure option for Existing Single Family Attic Insulation from R38 to R49. All other attic insulation measures remain. Please now use the measure for Single Family Attic Insulation R30 to R49 instead.	Expired this measure to be consistent with the RTF.
11.10.1	Insulation: Deleting the language that "Utilities may claim multiple existing single family insulation projects on the same invoice, but should use either the "Any Electric Heat" measures or HVAC-specific heating type measures and not both. Utilities may switch to claiming "Any Electric Heat" measures if reporting using the HVAC-specific heating measures delivers little benefit or they would like to claim higher payments."	With the new BEETS reporting system, utilities may claim single family insulation measures on the same invoice using any primary heating type.
11.10.1	Insulation. NOTE: This clarification will not be required until BEETS is operational. Adding clarification that project reporting to BPA will be based on the square footage of installed insulation rounded to the nearest whole number.	Clarifying how to report measure quantity in BEETS and to align guidance across sectors that will be
11.10.2	Prime Window and Patio Door Replacement: Deleting the language that "Utilities may claim multiple existing single family prime window and patio door replacements on the same invoice, but should use either the "Any Electric Heat" measures or HVAC-specific heating type measures and not both. Utilities may switch to claiming "Any Electric Heat" measures if reporting using the HVAC-specific heating measures delivers little benefit or they would like to claim higher payments."	With the new BEETS reporting system, utilities may claim multiple existing single family prime window and patio door replacements on the same invoice using any primary heating type.
11.10.2	Prime Windows and Patio Doors. Adding the language "Prime windows and patio doors should be reported on the invoice using the reference number that reflects the pre-existing pane count. If single and double-pane windows were replaced, the square footage of each type should be reported separately."	To clarify that utilities must invoice prime windows and patio doors to accurately reflect what the pre-existing window count is.

SECTION NUMBER	DESCRIPTION	RATIONALE
11.10.2	Window and Patio Door Replacements. NOTE: This clarification will not be required until BEETS is operational. Adding clarification that the reported project square footage shall be rounded up to the nearest whole number. Guidance on two different calculation methods are available to account for different types of installations.	Clarifying how to report measure quantity in BEETS and to align guidance across sectors.
11.10.4	Exterior Insulated Doors (BPA-Qualified): Additional path to qualification: In addition to being ENERGY STAR-rated, BPA now also accepts NFRC-rated doors that meet specific U-factor and solar heat gain coefficient requirements based on glazing levels.	Allowing an additional path to certify qualification.
11.10.4	Exterior Insulated Doors (BPA-Qualified): BPA clarified that the glazing level refers to the distinction of whether the replacement door is $\leq \frac{1}{2}$ -Lite, which refers to the proportion of the door that is taken up by a window.	Clarifying to address previous utility confusion.
11.10.4	Exterior Insulated Doors (BPA-Qualified): BPA accepts pre-existing models that were ENERGY STAR-Qualified at the time they were manufactured even if ENERGY STAR specifications have changed.	Allows previously ENERGY STAR models to address how to qualify older exterior insulated doors.
11.10.4	Exterior Insulated Doors (BPA-Qualified). BPA accepts a copy of the NFRC sticker to demonstrate qualification.	Allowing an additional path to certify qualification.
11.10.5	Whole House Air Sealing and Testing: BPA removed the requirement to document the age of the home.	Simplifying documentation requirements.
11.10.6	Prescriptive Air Sealing: BPA removed the requirement to document the age of the home.	Simplifying documentation requirements.
11.11	Low-Income Energy Efficiency Measures: BPA expired the retail distribution option for the low-income smart thermostat measure. Only contractor-installed smart thermostats qualify for a low-income payment.	Change made to ensure low-income installation costs are accounted for.
11.11	Low-Income Energy Efficiency Measures: BPA clarified that payment rates listed for low-income measures in the UES measure list may not reflect the overall reimbursement totals for some low-income weatherization measures. See the low-income section for total installation and repair cost reimbursement amounts.	Clarification added to address confusion about how to invoice low-income weatherization projects.
11.11	Low-Income Energy Efficiency Measures: BPA clarified additional examples for qualifying repair costs for heat pump water heaters.	Qualifying repair costs added.
11.11	Low-Income Energy Efficiency Measures: BPA clarified that gross income is to be used to calculate income qualification.	Clarification made to be consistent with WAP income qualification guidelines.
11.11	Low-Income Energy Efficiency Measures: BPA added a new low-income measure for the 40 Gallon Heat Pump Water Heater with an installed payment of dollar-for-dollar up to \$1,850.	Adding measure to be consistent with the new standard income measure.
11.11	Low-Income Energy Efficiency Measures: BPA increased low-income deemed measure installed payment cost caps for Ductless Heat Pumps up to \$4,400, PTCS Ducted Air Source Heat Pumps up to \$6,200, Tier 1 Heat Pump Water Heaters up to \$1,850, and Tier 2 or 3 Heat Pump Water Heaters up to \$2,000.	Updated some low-income payment cost caps to reflect recent RTF measure installation cost analysis.

SECTION NUMBER	DESCRIPTION	RATIONALE
11.11	Low-Income Energy Efficiency Measures: BPA added a new low-income measure for a Tier 4 Heat Pump Water Heater with an installed payment of dollar-for-dollar up to \$2,000 effective October 2021.	Adding measure to be consistent with the new standard income measure.
11.11	Low-Income Energy Efficiency Measures: BPA determined that Low-Income Heat Pump Water Heater Measures are eligible for all multifamily housing types (low, mid, and high-rise).	Aligning the IM and UES measure list.
11.11	Low-Income Energy Efficiency Measures: BPA removed the Ductless Heat Pump Project Information Form (PIF) documentation requirement for low-income. The make, model, and total project cost will now be collected in BEETS.	Simplifying documentation requirements.
11.11	Low-Income Energy Efficiency Measures: BPA no longer requires the Smart Thermostat Project Information Form (PIF) for low-income. The make and model number will now be collected in BEETS.	Simplifying documentation requirements.
11.11	Low-Income Energy Efficiency Measures: BPA no longer requires the PTCS Heat Pump and Duct Sealing Forms for low-income. Utilities only need to keep the Registry Installation Report on file.	Simplifying documentation requirements.
11.11	Low-Income Energy Efficiency: BPA clarified that Duct Insulation in Single Family Homes and Patio Door Replacements in Multifamily Mid/High-Rise Homes are eligible Low-Income measures.	Based on two previous 2020 change notices, clarifying qualifying low-income measures in the Low-Income Payment Table.
11.11	Low-Income Energy Efficiency Measures. Clarifying that any changes noticed for documentation, specification, and qualification requirements for a standard-income measure will be reflected in the equivalent Low-Income measure requirements.	Standard-Income and equivalent Low-Income measure implementation requirements should align, with the exception of a few additional documentation requirements for income qualifying Low-Income measures.
12.0	Utility Distribution Sector: BPA refreshed the overall chapter, reorganized the text, removed the utility distribution measures list from the Requirements and Specifications section (was the incorrect location as they are not requirements), and restructured the measures into a table.	Refreshed and streamlined this chapter to bring greater clarity to utility customers.
12.1	Utility Distribution Custom Projects: BPA renamed this section and clarified the "Requirements and Specifications" section. BPA also included reference to the Option 1 and Option 2 custom project sections and information about the Simplified Voltage Optimization M&V Protocol option.	Brings more clarity for utility customers.
12.1	Utility Distribution Custom Project Programs: BPA increased the incentive rate for New Construction and Major Renovation for Utility Distribution sector measures with 20+ measure life to \$0.35 per kWh.	Brings consistency to incentive rates between the sectors (excludes Commercial HVAC End Users) for New Construction and Major Renovation measures.
12.2	Re-Conductor & Transformer Calculator Option: BPA refreshed the opening paragraph and reformatted the "Requirements and Specifications" and "Documentation Requirements" sections. BPA also included additional information about the customer submission and review process and added reference to the Bonneville Energy Efficiency Tracking System, or BEETS.	Brings more clarity to this section.

APPENDIX C- OCTOBER 1, 2022 CHANGE NOTICE SUMMARY

SECTION NUMBER	DESCRIPTION	RATIONALE
1	Section updated to reflect reporting in BEETS.	Transition to BEETS.
2	Section updated to reflect reporting in BEETS.	To support BEETS transition.
2.1.1	Updated the term "Rollover" to "Carryover".	To align the IM terms and definitions with the new ECA.
2.1.2	The term "Bilateral Funding" and "Bilateral Transfers" has been changed to "Implementation Budget Transfer".	To align the language in the IM with the terms and definition in the new ECA.
2.1.2.3	Removed requirement for customers to submit a form for Implementation Budget Transfers and for authorization third-parties to request transfers on the customers behalf.	Transfer requests will be submitted in BEETS and the authorization for third-parties will be included the customers authorization for third-parties representing them in BEETS.
2.2	Updated table to reflect that utilities can report partial self-funding for all available applications.	To align with BEETS reporting requirements.
3	Section updated to reflect reporting in BEETS.	Support transition to BEETS.
4	Section updated to reflect reporting in BEETS.	Support transition to BEETS.
4.3.2.7	Edited the second sentence - to be consistent with Section 8.3.C.5, regarding the method to calculate the incremental commercial new construction costs.	Ensure IM language is consistent.
6.2	Measure distribution tables with description of documentation requirements says addresses are required in BEETS. Actually the data is optional in BEETS and can be provided through a distribution log or other document.	Clarifying that this data can be entered into BEETS but can also be contained in a distribution log or other format.
8.3	Item C.1.b Requirements and Specifications, Item 5: Corrected the third bullet - to be consistent with Section 4.3.2, item 7 regarding the method to calculate the incremental costs for commercial new construction projects without cost data.	Ensure the IM language is consistent.
8.4.3	Requirements and Specifications, Post-conditions table: Indoor Unit Types: Non-Ducted, Efficiency Requirement added 'or 10.4 HSPF2' rating option. Ducted or Mixed, Efficiency Requirement added 'or 9.4 HSPF2' rating option.	The table did not reference the new HSPF2 ratings which will be the only ratings available for equipment manufactured after January 1, 2023.
8.4.4	Requirements and Specifications, Post-conditions table: Equipment Size: < 65,000 Btu/H, Mode: Cooling, Efficiency Requirement added 'or 14.3 SEER2' rating option Heating, Efficiency Requirement added 'or 7.2 HSPF2' rating option.	The table did not reference the new SEER2 or HSPF2 ratings which will be the only ratings available for equipment manufactured after January 1, 2023.
8.5.1	Documentation Requirements table, removed the last requirement for customers to retain in their files the AHRI Certificate that documents efficiency requirements have been met.	AHRI does not create certificates for insulation products and this requirement was never intended for the insulation measure.
10.3.1	Requirements and Specifications, added school districts to the list of eligible EPM sites.	Clarifies intent to allow a school district to qualify as a site for the purposes of tracking and reporting Energy Project Manager activities.
11.7.1	Updated the section number in the eligibility table for manufactured existing with a ductless mini split heat pump baseline to reflect the correct section in the IM.	Removed old information and added correct information.

SECTION NUMBER	DESCRIPTION	RATIONALE
11.7.1	Added verbiage that a failed heat pump system operating with electric resistance back-up heat is not considered electric-resistance for the purposes of meeting pre-condition requirements. Included the measure, Ductless Heat Pump Upgrade section 11.7.1.2, that should be utilized.	Added clarifying verbiage to address ongoing confusion.
11.7.1	Added the HSPF2 to the requirements and specification and document description table.	Added the equivalent HSPF2 value in preparation for the DOE's new ratings starting January 2023. Current HSPF values remain active for equipment manufactured before January 2023.
11.7.1	Updated language that DHP must be installed by a licensed contractor.	Updated requirements for clarity and to avoid installs that did not meet BPA's qualifications.
11.7.1.2	Added the HSPF2 to the requirements and specification and document description table.	Added the equivalent HSPF2 value in preparation for the DOE's new ratings starting January 2023. Current HSPF values remain active for equipment manufactured before January 2023.
11.7.1.2	Updated the eligibility table to include all eligible applications.	The change was missed in a previous update and is being fixed.
11.7.1.2	Updated the language that a DHP must be installed by a licensed contractor.	Updated requirements for clarity and to avoid installs that did not meet BPA's qualifications.
11.7.2.1	PTCS Air Source Heat Pumps: Added new designation of HSPF2 and SEER2 to efficiency requirements. HSPF2 and SEER2 apply to units manufactured after January 1, 2023, based on DOE's recent change to national standard testing methodology.	The new HSPF2 and SEER2 are equivalent to BPA's prior HSPF and SEER metrics, so do not reflect the boost in energy efficiency found in the new national standard. That boost will be incorporated into new HSPF2 and SEER2 values reflected in the new Rate Period IM for October 2023.
11.7.2.2	PTCS Variable Source Heat Pumps: Added new designation of HSPF2 and SEER2 to efficiency requirements. HSPF2 and SEER2 apply to units manufactured after January 1, 2023, based on DOE's recent change to national standard testing methodology.	The new HSPF2 and SEER2 are equivalent to BPA's prior HSPF and SEER metrics, so do not reflect the boost in energy efficiency found in the new national standard. That boost will be incorporated into new HSPF2 and SEER2 values reflected in the new Rate Period IM for October 2023.
11.7.2.3	PTCS Commissioning, Controls & Sizing: Correct error in CC&S Documentation Requirements table so the table reads: PTCS Site Registry Measure ID reflecting "PTCS Certified Only" status.	The Registry does not provide a "BPA-Approved" status for the CC&S measure. Rather, it provides only a "PTCS Certified Only" status (claimable by utilities), or a Rejected status (not claimable by utilities).
11.7.2.3	PTCS Commissioning, Controls and Sizing: Added new designation of HSPF2 and SEER2 to efficiency requirements. HSPF2 and SEER2 apply to units manufactured after January 1, 2023, based on DOE's recent change to national standard testing methodology.	The new HSPF2 is equivalent to BPA's current HSPF metric, so does not reflect the boost in energy efficiency found in the new national standard. That boost will be incorporated into new HSPF2 and SEER2 values reflected in the new Rate Period IM for October 2023. The IM does not contain a SEER requirement for the CC&S measure.
11.7.5	Non PTCS Air-Source Heat Pump Conversion from Electric Forced-Air Furnace to Air-Source Heat Pump: Added new designation of HSPF2 and SEER2 to efficiency requirements. HSPF2 and SEER2 apply to units manufactured after January 1, 2023, based on DOE's recent change to national standard testing methodology.	The new HSPF2 and SEER2 are equivalent to BPA's prior HSPF and SEER metrics, so do not reflect the boost in energy efficiency found in the new national standard. That boost will be incorporated into new HSPF2 and SEER2 values reflected in the new Rate Period IM for October 2023.
11.7.5	Non PTCS Air-Source Heat Pump Conversion from Electric Forced-Air Furnace to Air-Source Heat Pump: Added the HSPF2 and SEER2 values to the requirements and specification and document description table.	Added the equivalent HSPF2 and SEER2 values in preparation for the DOE's new ratings starting January 2023. Current HSPF and SEER values remain active for equipment manufactured before January 2023.

SECTION NUMBER	DESCRIPTION	RATIONALE
11.7.6	Non PTCS Air-Source Heat Pump Conversion from Electric Forced-Air Furnace to Variable Speed Air-Source Heat Pump: Added new designation of HSPF2 and SEER2 to efficiency requirements. HSPF2 and SEER2 apply to units manufactured after January 1, 2023, based on DOE's recent change to national standard testing methodology.	The new HSPF2 and SEER2 are equivalent to BPA's prior HSPF and SEER metrics, so do not reflect the boost in energy efficiency found in the new national standard. That boost will be incorporated into new HSPF2 and SEER2 values reflected in the new Rate Period IM for October 2023.
11.7.6	Non PTCS Air-Source Heat Pump Conversion from Electric Forced-Air Furnace to Variable Speed Air-Source Heat Pump: Added the HSPF2 and SEER2 values to the requirements and specification and document description table.	Added the equivalent HSPF2 and SEER2 values in preparation for the DOE's new ratings starting January 2023. Current HSPF and SEER values remain active for equipment manufactured before January 2023.
11.7.7	Non PTCS Air-Source Heat Pump Upgrade: Added new designation of HSPF2 and SEER2 to efficiency requirements. HSPF2 and SEER2 apply to units manufactured after January 1, 2023, based on DOE's recent change to national standard testing methodology.	The new HSPF2 and SEER2 are equivalent to BPA's prior HSPF and SEER metrics, so do not reflect the boost in energy efficiency found in the new national standard. That boost will be incorporated into new HSPF2 and SEER2 values reflected in the new Rate Period IM for October 2023.
11.7.7	Non PTCS Air-Source Heat Pump Upgrade: Added the HSPF2 and SEER2 values to the requirements and specification and document description table.	Added the equivalent HSPF2 and SEER2 values in preparation for the DOE's new ratings starting January 2023. Current HSPF and SEER values remain active for equipment manufactured before January 2023.
11.7.8	Non PTCS Variable-Speed Air-Source Heat Pump Upgrade: Added new designation of HSPF2 and SEER2 to efficiency requirements. HSPF2 and SEER2 apply to units manufactured after January 1, 2023, based on DOE's recent change to national standard testing methodology.	The new HSPF2 and SEER2 are equivalent to BPA's prior HSPF and SEER metrics, so do not reflect the boost in energy efficiency found in the new national standard. That boost will be incorporated into new HSPF2 and SEER2 values reflected in the new Rate Period IM for October 2023.
11.7.8	Non PTCS Variable-Speed Air-Source Heat Pump Upgrade: Added the HSPF2 and SEER2 values to the requirements and specification and document description table.	Added the equivalent HSPF2 and SEER2 values in preparation for the DOE's new ratings starting January 2023. Current HSPF and SEER values remain active for equipment manufactured before January 2023.
11.7.9	Centrally Ducted Air Conditioners: Added new designation of SEER2 to efficiency requirements. SEER2 applies to units manufactured after January 1, 2023, based on DOE's recent change to national standard testing methodology.	The new SEER2 requirement is equivalent to BPA's prior SEER metric, so does not reflect the boost in energy efficiency found in the new national standard. That boost will be incorporated into new SEER2 value reflected in the new Rate Period IM for October 2023.
11.7.9	Centrally Ducted Air Conditioners: Added the SEER2 values to the requirements and specification and document description table.	Added the equivalent SEER2 value in preparation for the DOE's new ratings starting January 2023. Current HSPF and SEER values remain active for equipment manufactured before January 2023.
11.11	Low-Income Energy Efficiency. Clarification added in the Low-Income Payment Table that a PTCS Heat Pump Upgrade or Conversion includes both non-variable and variable speed heat pumps. When claiming a low-income PTCS Variable Speed Heat Pump, utilities should use the RefNo for a Low-Income PTCS Air Source Heat Pump.	Clarification added that Variable Speed Heat Pumps are considered an Air Source Heat Pump and are also eligible for a Low-Income payment.
11.11	Low-Income Energy Efficiency. Updated the Documentation Requirements Table for Low-Income Ductless Heat Pumps to reflect the new HSPF2 efficiency rating.	Added the new designation of HSPF2 to accommodate DOE's change to national standard testing methodology effective for units manufactured beginning January 1, 2023.
11.12	Updating invoicing instruction for clarity.	Changing verbiage to communicate when utilities can invoice BPA for the measure.
12	Clarified on page 1, ability for all customers to submit but option 1 customers have an additional pathway	Updated for additional clarification

SECTION NUMBER	DESCRIPTION	RATIONALE
Appendix A	Added Program Participant to Definitions section	Added for clarity in definitions and terms used, to define Program Participant as a BPA customer with an ECA agreement in effect.
Appendix A	Removed Bilateral Transfer from Definitions section.	No longer using this terminology.
Appendix A	Added Implementation Budget Transfer to definitions section.	Replaces the term Bilateral Transfer.
Appendix A	Removed Rollover Amount from definitions section.	No longer using this terminology.
Appendix A	Added Carryover Amount to Definitions section.	Replaces the term Rollover Amount.
Changes Effective October 2023		
11.9.3	Single-Family New Construction Performance Path will expire October 1, 2023.	NEEA no longer supports these measures.
11.9.4	Montana House measures will expire October 1, 2023.	The RTF no longer supports these measures.