

# April 2020 Implementation Manual Changes

March 19, 2020



# General IM Changes

Ryan LeBaron, Commercial Program Manager

# Changes made to non-Sector Chapters

- IM Publication Schedule, page XXX – Corrected second reference from April 2020 to April 2021
- New “return to Table of Contents” feature in online Implementation Manual at bottom of each page.



# Changes made to non-Sector Chapters

- 0.0 Definitions:
  - Busbar Energy Savings. Added language to clarify the site-to-busbar savings factor for the BPA lighting calculator.
- 4.0 Custom Projects
  - 4.1 Added language to clarify the site-to-busbar savings factor for the BPA lighting calculator.
  - 4.3.2 Custom Projects General Requirements. Added language to differentiate between Option 1 and Option 2 customer M&V requirements when submitting nonresidential lighting custom projects.

# Agricultural Changes

David J. Lee  
Agriculture Sector Lead

## 6.6.1 Irrigation System Conversion: LESA/LEPA/MIDI

- Description: Added language clarifying that the LESA/LEPA/MDI measure was applicable to new or existing applications.
- Rationale: Addressed potential ambiguity in the language as previously written.

## 6.6.2 Sprinkler Package Replacement

- Description: Added clarification to the specifying the sprinkler replacement package measure was only applicable to sprinkler retrofits.
- Rationale: This change addressed some potential ambiguity in the language as written.

## **6.6.3 Irrigation System Conversion: MESA**

- Description: Clarification that the MESA retrofit measure is for existing pivots and not for new pivots.
- Rationale: Provides additional language that reduces ambiguity and ensures consistency with the UES measure list.

## **6.7.5 Agricultural New Pump Efficiency Upgrade**

- Description: Provided clarification that the measure is intended only for brand-new irrigation pumps.
- Rationale: To address customer questions about whether or not rebuilt pumps (very common in agricultural applications) qualify for this measure.

**Questions?**

# Commercial Changes

Ryan LeBaron

Ryan LeBaron, Commercial Program Manager

## 7.4.3 Ductless Heat Pump Retrofit and Upgrade

- The Ductless Heat Pump Efficiency Requirement table was updated to include Mini-Split systems.

INDOOR UNIT TYPE	EFFICIENCY REQUIREMENT
<b>Mini-Split</b> or Non-Ducted	11.0 HSPF
Ducted or Mixed	10.0 HSPF

- Also updated the DHP Qualified Products List (QPL) and Program Information Form (PIF), accordingly.

# Good to Knows

- LC 5.1 estimated release October 2020

**Questions?**

# Industrial Changes

Ryan LeBaron  
Commercial Program Manager

## 9.4 Small Compressed Air Systems

- Compressed Air Calculator Version 3.5 is retiring October 1, 2020.
- Compressed Air Calculator Version 4.0 was effective October 1, 2019 and includes more updated energy savings calculation methodology.

# **9.5 High Frequency Battery Charger Upgrade (BPA-Qualified)**

- Removed requirement: BPA recommends the power conversion efficiency be no less than 89%

# Good to Knows

- Updated High Frequency Battery Charger Upgrade calculator estimated release in Spring 2020

**Questions?**

# **Residential Sector Changes**

Jess Kincaid

Residential Sector Lead

# 10.6 Simple Steps, Smart Savings Retail Promotion

- The BPA Simple Steps promotion and all Simple Steps measures will **expire on September 30, 2020**. Decreasing residential lighting savings and payments make this promotion obsolete.

# 10.7.1.1 Ductless and Ducted Mini-Split Heat Pump(s)

- Updated errors in the Eligibility Table that incorrectly referenced DHP Upgrades as section 10.7.2. DHP Upgrades are in the Implementation Manual under section 10.7.1.2.

# 10.7.1.1 Ductless and Ducted Mini-Split Heat Pump(s)

- Removal of Additional Information language that could be interpreted as a requirement. Strikethrough has been applied to the following language:  
*"Mini-splits with a multi-position ducted indoor air handler should be invoiced as an air source heat pump even when the air handler and ductless heads are served by the same outdoor compressor."*
- BPA still prefers, where possible, that these combination systems are reported as air source heat pumps for savings reliability reasons.

# 10.7.1.2 Ductless Heat Pump Upgrade

- Removal of Additional Information language that could be interpreted as a requirement. Strikethrough has been applied to the following language:  
*"Mini-splits with a multi-position ducted indoor air handler should be invoiced as an air source heat pump even when the air handler and ductless heads are served by the same outdoor compressor."*
- BPA still prefers, where possible, that these combination systems are reported as air source heat pumps for savings reliability reasons.

## **10.7.2.5 PTCS Duct Sealing**

- Corrected reference in the Documentation Requirements table for the “Ground Source Heat Pump Form.”

## **10.7.3 Prescriptive Duct Sealing**

- Corrected reference for “PTCS Duct Sealing Specification” in the Requirements and Specification section.

## **10.7.3 Prescriptive Duct Sealing**

- BPA will allow pre authorized training programs that meet or exceed BPA specifications and requirements. Utilities should use the COTR request and acknowledgement procedure to make this request.

# **10.9.2 Replacement of Pre-1976 Manufactured Home with New Northwest Energy Efficient Manufactured Housing (NEEM) Certified Home**

- Added Air Source Heat Pump (ASHP) measures with and without PTCS commissioning to the Additional Information table in section 10.9.2 as allowable stand-alone measures in new manufactured homes.
  - 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.

# 10.10.1 Insulation

- Removed an outdated reference to manufactured home floor insulation. BPA and the Regional Technical Forum removed R-11 manufactured home floor insulation in 2015/16. A reference remained in the BPA Implementation Manual, but has now been removed.
  - Manufactured home floors must be insulated to a thermal value of R-22 or maximum possible.

# 10.10.2 Prime Window and Patio Door Replacement

- Clarification to allow up to 10% variance between rough opening sizes and final invoiced window dimensions to account for variability in measurements.
  - Additional Information language added to clarify allowable variation of window measurements for compliance and oversight.

# 10.10.7 Low-Income Energy Efficiency Measures

- Clarification: Ductless and Ducted Mini-Split Heat Pump(s) are available as a qualifying low-income measure, this includes a conversion with a precondition of electric resistance heat (10.7.1.1) and a DHP Upgrade from existing ductless heat pump (10.7.1.2). This applies for existing single-family and manufactured homes.
- BPA is adding low-income measure reference numbers for utilities to invoice a DHP Upgrade for a low-income household.

# **New Residential Measures**

# 13.2.5.1 Level 2 Electric Vehicle Chargers

- This new measure is now available for all types of residential homes. The Regional Technical Forum (RTF) adopted this measure in May 2019, BPA is making it available to utilities beginning April 1<sup>st</sup>, 2020. Qualifying units must be on the ENERGY STAR Qualified Product List and have networking capability.
  - For more information on measure specifications and requirements see Section 13 of the Implementation Manual.
  - This measure is only available for residential applications including multifamily buildings

## **13.2.5.2 Behavioral Home Energy Reports (BPA-Qualified)**

- This new measure, available for all residential home types, provides a deemed UES savings value for Behavioral Home Energy Reports. Reports are regularly sent to residential customers with information on household energy consumption, a normative comparison to similar households, and energy efficiency tips. Energy savings are derived from a weighted average of evaluated Northwest behavioral energy programs.
  - For more information on measure specifications and requirements see Section 13 of the Implementation Manual.

## **13.2.5.3 Duct Insulation**

- This new measure is now available for single family homes. The measure is also available as a low-income energy efficiency measure.
- For more information on measure specifications and requirements see Section 13 of the Implementation Manual.

# Utility Distribution Changes

Tony Koch, Mechanical Engineer

# RT Calculator (13.2.4.1)

- The RT Calculator is short for Re-conductor and Transformer
- It is a new Excel based calculator that provides an alternative incentive path for re-conductor and transformer measures that normally are submitted as custom projects
- Over the past 2-3 years more than 20 utilities have submitted re-conductor or transformer custom projects. The savings tend to be small.
- The RT Calculator was built to reduce administrative burden on the customers and BPA review & approval team (COTR and engineer)
- The file simplifies calculations and automates entries by the customer
- It can allow up to six re-conductor and 6 transformer measures to be submitted in one file

# RT Calculator (continued)

- The RT Calculator was tested in IS2.0 system successfully and features the ability to embed a Project Cost pdf type file(s) per measure in the file itself. That means that technical review and compliance review of project cost be done with just one file
- The file requires a BPA technical review (either Nathan Kelly or Tony Koch) and a COTR compliance review. There is a BPA Review tab for the engineer and COTR to enter name and date of review

**Questions?**

**Thank you  
for your time**

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