

DEEMED SAVINGS TECHNICAL ASSUMPTIONS

Program: Energy Savings Kit

Description:

A package of home energy efficiency measures in a kit that will be distributed to low-income customers. Each participant receives a kit containing a high-efficiency showerhead, two high efficiency sink aerators (1.0 GPM and 1.5 GPM), and eight LED bulbs, 10 Watts each.

Program References:

Masures "Provide Efficient Showerhead"	Refer to Program "Energy Efficient Showerhead - CO" to find formulas for Customer Dth, Customer kWh, customer kW, customer PCKW, etc. for the "Efficient Showerhead" measures.
Measures "Provide Efficient Kitchen Faucet Aerator"	Refer to Program "Energy Efficient Showerhead - CO" to find formulas for Customer Dth, Customer kWh, customer kW, customer PCKW, etc. for the "Efficient Kitchen Faucet Aerator" measure.
Measures "Provide Efficient Bath Faucet Aerator"	Refer to Program "Energy Efficient Showerhead - CO" to find formulas for Customer Dth, Customer kWh, customer kW, customer PCKW, etc. for the "Efficient Bath Faucet Aerator" measure.
Replace incandescent lamps with LEDs	Refer to Program CO Home Lighting & Recycling to find formulas for Customer kW, Customer kWh, Customer PCKW for the "Replace incandescent lamp with LED".
Measure "Provide Efficient Showerhead"	Refer to Program "Energy Efficient Showerhead - CO" to find reference table for "Gas Split Factor", "Measure Life", "Hours", "Coincidence Factor", etc values.
Measures "Provide Efficient Kitchen Faucet Aerator"	Refer to Program "Energy Efficient Showerhead - CO" to find reference table for "Gas Split Factor", "Measure Life", "Hours", "Coincidence Factor", etc values.
Measures "Provide Efficient Bath Faucet Aerator"	Refer to Program "Energy Efficient Showerhead - CO" to find reference table for "Gas Split Factor", "Measure Life", "Hours", "Coincidence Factor", etc values.
Measure "LED"	Refer to Program "Home Lighting and Recycling - CO" to find references and tables for " Measure Life ", "Hours", "Coincidence Factor", etc values.
Measure "Provide Efficient Showerhead"	Refer to Program "Energy Efficient Showerhead - CO" to find reference table for Operation and Maintenance cost savings value due to water savings.
Measures "Provide Efficient Kitchen Faucet Aerator"	Refer to Program "Energy Efficient Showerhead - CO" to find reference table for Operation and Maintenance cost savings value due to water savings.
Measures "Provide Efficient Bath Faucet Aerator"	Refer to Program "Energy Efficient Showerhead - CO" to find reference table for "Operation and Maintenance cost savings", value due to water savings.

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Algorithms:

All measures	Refer to Source Programs for energy savings calculation algorithms.
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Variables:

Energy O&M savings	Varies by customer	= Savings attributed to savings of fuel not served by Xcel Energy. Varies by customer depending on customer type and water heating fuel.
Net-to-Gross Factor (NTG)	100%	= We will use 100% as these kits would not be available without the product.
Install Rate	Table 1	= Installation rates will be determined during the year.
Incremental Costs for all measures	Input	= costs provided by vendor.
Lamp Lifetime	25000	= Lifetime of lamp in kit. From Spec sheet From implementor

Inputs:

	Verified during
Provided by Vendor/customer:	M&V:
Number of kits distributed	Yes
Number of LEDs installed	Yes
Showerhead Installed	Yes
Kitchen aerator installed	Yes
Bath aerator installed	Yes

Assumptions:

Savings shown above include homes with either electric or gas water heaters. The Energy Efficient Showerhead - CO program monitors and establishes a gas split factor for use in homes where the water heater type is unknown. Energy Savings Kits will use the Energy Efficient Showerhead - CO program's gas split factor for unknown water heater types to calculate and claim energy savings.

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Tables:

Table 1

Measure	Install Rate
Replace incandescent lamps with LEDs	74.60%
Provide Efficient Showerhead - Electric Water Heater	70.10%
Provide Efficient Kitchen Faucet Aerator - Electric Water Heater	64.00%
Provide Efficient Bath Faucet Aerator - Electric Water Heater	68.10%

References:

See Reference Programs Energy Efficient Showerhead - CO Home Lighting and Recycling - CO Lamp spec sheet provided by implementer Colorado House Bill 2019 1231
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Changes from 2017 / 2018 Plan

Cleaned up Deemed sheet Added table for install rate in deemed sheet
