

Planned Changes to Wattsmart Business in Washington Proposed Effective Date of January 1, 2020

PacifiCorp is planning modifications to the Wattsmart Business energy efficiency incentive program, which is offered through Schedule 140. Consistent with the change process for the Wattsmart Business program documented and approved in Advice 13-08 (Docket UE-132083), notice of the changes will be posted on the program website¹ 45 days prior to implementation. Proposed changes to the incentive tables are included in Exhibit A.

Background

The Wattsmart Business program is available to Pacific Power's commercial, industrial, and irrigation customers in Washington and offers incentives for prescriptive/typical, custom, and energy management measures. Incentives are available for both retrofit projects and new construction/major renovation projects. There is an enhanced incentive offer for existing small business customers as well as an instant incentive offer for qualifying lamps from participating distributors.²

Description of Planned Wattsmart Business Changes

These changes are intended to

- a) Increase participation by
 - Adding incentives to Motors table
 - Adding incentives to HVAC Equipment table
 - Adding Direct Install offerings for select measures
 - Restructuring the New Construction/Major Renovation lighting incentive table
 - Expanding Advanced Rooftop Unit Control measures to allow the installation of control systems on new rooftop units and to include Demand-Controlled Ventilation (DCV) only applications
 - Offering vendor incentives to encourage the uptake of certain energy savings measures.
- b) Update measures to align with Regional Technical Forum and Consortium for Energy Efficiency changes
 - Revise Unit Energy Savings for Irrigation Hardware Measures
- c) Modify incentives in Food Service Equipment table
- d) Modify incentives in Office Energy Efficiency table
- e) Add incentives to the Small Business Lighting table
- f) Remove non-lighting incentive offerings for Small Businesses
- g) Remove some incentives from Mid-Market Incentives table
- h) Make other minor administrative changes and maintain measures

¹ <https://www.pacificpower.net/savings-energy-choices/business/wattsmart-efficiency-incentives-washington.html>

² This offer is marketed to customers as the Lighting Instant Incentive. It is also referred to as a "midstream" offer and is labeled as "mid-market" in Exhibit A.

Explanation of Changes

The planned program changes are summarized in the tables below. For additional details, refer to the revised Wattsmart Business incentive tables and information, attached as Exhibit A. Exhibit A is marked in redline form to show the planned changes relative to the current program.³

Incentives – General Information – Exhibit A, page 4-6		
Category	Description of Change	Reason for Change
Food Service	Add incentive caps for Demand Controlled Kitchen Ventilation Exhaust Hood measure	See explanation in Food Service section below
Enhanced Incentives for Small Businesses – Non-lighting	Remove this category from the table	The non-lighting measures are removed from the program (see explanation below), so they are removed from this table also.
Direct Install Incentives	Add this new category to the table	New Direct Install measures are added to the program and to this table (see explanation below).

Lighting System Retrofits – Exhibit A, page 8-9		
Measure	Description of Change	Reason for Change
Interior Lighting Advanced Controls	Update measure name to include “Advanced <i>Networked</i> Lighting Controls”	No changes to measure requirements/incentives. The Northwest Energy Efficiency Alliance (and DesignLights Consortium) has standardized this language (Networked Lighting Controls) for advanced interior lighting controls. Modified language to align with this standardized term.
LED Case Lighting – Refrigerated Case LED Case Lighting – Freezer Case LED Case Lighting Occupancy Sensor	Update UES values	No changes to measure requirements/incentives. Measure unit energy savings (UES) values are revised to align with the latest Regional Technical Forum (RTF) measure assessment.

³ For reference, the current program and incentive tables can be found at https://www.pacificpower.net/content/dam/pcorp/documents/en/pacificpower/savings-energy-choices/wattsmart-business/washington/WA_wattsmartBusiness_Incentive_tables_information.pdf

New Construction/Major Renovation – Exhibit A, page 10-11

Measure	Description of Change	Reason for Change
Interior Troffer Interior Linear Ambient Interior High Bay Interior Other qualifying measures	Change from paying incentives per kWh saved to pay incentive per fixture or per fixture wattage Add DesignLights Consortium Premium requirement	<p>LED lighting technology is becoming an industry-preferred choice for interior lighting in new construction and major renovation projects. The proposed incentive structure will incentivize interior LED fixtures that meet DesignLights Consortium Premium category requirements, and will simplify the participation process.</p> <p>Lighting will be verified to meet code requirements using code compliance documentation and COMcheck or a similar tool. Utilizing existing documentation will simplify the incentive process. Incentives will not be paid for lighting that does not exceed code.</p> <p>Incremental costs and savings will be calculated, based on fixture type, building type, square footage, and other factors.</p> <p>Other fixtures may qualify for incentives if they meet code and are installed in buildings where energy code applies.</p>
Interior Advanced Networked Lighting Controls	Change from paying incentives per kWh saved to pay incentive per watt controlled	Changing the incentive from a per kWh saved basis to a per watt controlled basis will encourage more controls by simplifying the incentive estimation process and maximizing the wattage controlled. Additionally, through past experience, a per watt controlled incentive equally benefits large and small customers (by removing the operating hours component) and is expected to increase participation amongst the small customer projects.
Exterior Lighting: Induction Fixture LED Outdoor Pole/Roadway, decorative LED Canopy/Soffit	Remove incentives for these measures installed in new construction/major renovation	LEDs have become industry standard for new construction and major renovation exterior lighting applications due to their competitive cost, longer lifetimes, higher efficacy which makes it easier to meet energy codes, and overall lower energy usage. ⁴ Given this, exterior lighting incentives for LEDs are no longer needed and incentives will only be available for advanced lighting controls. Note the source in the footnote is from California, and is included to provide further background on LEDs in exterior applications.

⁴ Exterior Lighting Standard Practice Baseline and Work Paper Support – Final Report, December 31, 2018. http://www.calmac.org/publications/TRC_-_SCE_Ext_Lighting_SP_and_WP_Support_Final_Report.pdf

LED Wall packs LED Flood Lights		
Exterior Advanced Lighting Controls	Change from paying custom incentives per kWh saved to pay incentives per watt controlled	Incentivizing controls based on a watt-controlled basis instead of a per-kWh saved basis will encourage more controls by simplifying the incentive estimation process and maximizing the wattage controlled. Additionally, through past experience, a per watt controlled incentive structure equally benefits large and small customers and is expected to increase participation amongst the small customer projects.
Custom Lighting	Offer incentives for projects in which equipment is installed in facilities where energy code does not apply.	Some new construction and major renovation lighting projects occur in facilities where energy code does not apply, such as indoor agriculture. These projects receive an incentive based on the kWh savings.

Motors – Exhibit A, page 12		
Measure	Description of Change	Reason for Change
Electronically Commutated Motor (ECM) – Retrofit Only	Add new listed measure for HVAC fan and pump ECMs greater than 1 horsepower.	<p>ECM technology is expanding and the market has options for motors larger than 1 hp. Creating a large ECM measure for HVAC fan and pump applications will simplify the participation process and offer an alternative to the custom route for installation of these motors.</p> <p>For the heating/cooling measure, incremental savings will be deemed. For the ventilation measure, incremental savings will be calculated based on site specific information including annual building operation hours. Measure costs reported will be the deemed incremental costs for both the heating/cooling measure and the ventilation measure.</p> <p>Deemed savings are based on the calculation methodology outlined in the Wisconsin technical reference manual. These savings were determined using ASHRAE climate data for regions in the Pacific Power Washington territory.</p> <p>Additional eligibility requirements will be described on the program website and in the</p>

		customer incentive application to ensure appropriate measure savings.
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HVAC Equipment – Exhibit A, page 13-16		
Measure	Description of Change	Reason for Change
Unitary CAC Air Cooled Unitary CAC Water Cooled Unitary CAC Evap Cooled HP Air Cooled	Add clarifying note about the CEE efficiency requirements.	The CEE requirements for some Unitary Commercial Air Conditioner and Heat Pump measures have a full load requirement that has not been widely attained by the market. Ensuring that the CEE part load requirement is met still achieves energy savings, while not being so stringent that participation is stifled. Savings will continue to be calculated based on site specific information, using a code efficiency-level baseline.
Heat Pumps, Air Cooled, replacing electric resistance heating (Retrofit only)	Add new measures	Replacing electric resistance heating with heat pumps offers significant energy savings opportunities. Savings will be calculated using the HVAC calculator tool. Costs will be actual material and labor costs from customer invoices. Additional eligibility requirements will be described on the program website and in the customer incentive application to ensure appropriate measure savings.
Heat Pump (CTA-2045)	Add new measure	This is an additional incentive that can be added on to heat pump incentives for qualifying units. CTA-2045 compliant equipment has a demand response modular port. Offering an additional incentive for equipment that meets this standard will encourage early adoption of standard-compliant technology before the 2021 regulatory start date.

Other HVAC Equipment and Controls – Exhibit A, page 17-18		
Measure	Description of Change	Reason for Change
Advanced Rooftop Unit Control (Existing RTU)	Specify the eligibility as “existing RTU” only	To provide differentiation between ARC measures as the offerings expand to new-RTU and DCV-only equipment.

<p>Advanced Rooftop Unit Control Demand-Controlled Ventilation only (Existing RTU)</p>	<p>Add new measure</p>	<p>On occasion, existing rooftop units have variable speed motor controls, but are lacking the sensors and economizer controls.</p> <p>To provide comprehensive control options to customers considering advanced rooftop unit controls (ARC) on all existing rooftop units, the program is adding a variation of ARC that will allow a prescriptive incentive to be paid on rooftop units with existing motor controls.</p> <p>Savings will be calculated based on site specific information including annual building operation hours. Measure costs reported will be actual material and labor costs from customer invoices.</p> <p>Incentives are intended to offset 30 to 40% of implementation costs and vary based on the cooling capacity of existing rooftop units. Actual measure costs will be monitored so incentives can be adjusted as costs for the advanced rooftop unit controls change.</p> <p>Additional eligibility requirements will be described on the program website and in the customer incentive application to ensure appropriate measure savings.</p>
<p>Advanced Rooftop Unit Control (New RTU)</p>	<p>Add new measure</p>	<p>Significant energy savings can be achieved by incorporating motor and economizer controls into new rooftop units.</p> <p>Savings will be calculated based on site specific information including annual building operation hours. Measure costs reported will be actual material and labor costs from customer invoices.</p> <p>Incentives are intended to offset 30 to 40% of implementation costs and vary based on the cooling capacity of existing rooftop units. Actual measure costs will be monitored so incentives can be adjusted as costs for the advanced rooftop unit controls change.</p> <p>Additional eligibility requirements will be described on the program website and in the</p>

		customer incentive application to ensure appropriate measure savings.
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Food Service Equipment – Exhibit A, page 21-22		
Measure	Description of Change	Reason for Change
Electric Steam Cooker	Remove Heavy Load efficiency requirements. Expand incentives to all equipment sizes. Update UES values.	Measure requirements and UES values are being revised to align with the latest RTF measure assessment.
Electric Combination Oven	Expand 6-15 pan equipment category to include 5 pan combination ovens. Update UES values for both measure size categories.	Size category is being updated to align with the latest RTF measure assessment. Measure UES values are being revised to align with the latest RTF measure assessment.
Ice Machines (Air-Cooled Only)	Remove CEE Tier 2 ice machines. Expand ENERGY STAR qualified incentive offerings to align with DEER and PG&E workbook.	CEE Tier 2 is not as stringent as the new federal minimum standards. These measures will be revised to align with California’s Database of Energy Efficiency Resources (DEER) and a PG&E workbook, and the measures will have expanded size categories.
Demand Controlled Kitchen Ventilation Exhaust Hood	Remove Retrofit Only specification, and allow for incentives in new construction and major renovation applications. Add incentive caps.	Measure participation is low for installations in retrofit applications, so it is proposed to expand the measure availability to allow for new construction and major renovation applications. The NCMR option will only be available when demand controlled kitchen ventilation exhaust hoods are not required by energy code. For new construction/major renovation applications, savings will be calculated based on site specific information including facility type and operating schedule. Measure costs reported will be actual material and labor costs from customer invoices. Incentive caps are being added to this measure to ensure that the program does not pay incentives for more than 70% of the cost of the equipment.

		Additional eligibility requirements will be described on the program website and in the customer incentive application to ensure appropriate measure savings.
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Appliance Incentives – Exhibit A, page 23		
Measure	Description of Change	Reason for Change
Commercial Clothes Washer	Updating measure life values	Measure life values are being revised to align with the latest RTF measure assessment.

Office Energy Efficiency Incentives – Exhibit A, page 23		
Measure	Description of Change	Reason for Change
Smart Plug Strip	Reduce incentive Update measure implementation	<p>Measure is not cost effective in RTF workbook or for the program. However, the load sensing advanced power strip in RTF is cost effective and can be offered as a downstream measure. The plug strip must be listed on the Qualified Product List (to be defined and managed by the program administrator) in order to receive an incentive.</p> <p>The load sensing smart plug strips have a reduced incremental cost. The incentive is being reduced to be about half the incremental cost of the product.</p> <p>Savings will be deemed based on RTF data. Measure costs reported will be deemed incremental costs, based on market data for the equipment on the Qualified Product List.</p>

Irrigation Hardware Measures – Exhibit A, pages 24-26		
Measure	Description of Change	Reason for Change
New rotating, sprinkler replacing worn or leaking impact or rotating sprinkler	Reduce savings from 64.0 kWh to 3.4 kWh per sprinkler. Reduce incentive from \$3.00 to \$0.50 per sprinkler.	On March 28, 2018 RTF approved updates to the irrigation hardware UES measures. Measures were broken into two groups: Maintenance and Upgrades. Savings were reduced as a result of several new assumptions underlying the analysis. It was assumed that the efficient case is represented by a leakage rate at the 25 th percentile of surveyed systems, not the completely leak-free case. Also, savings were reduced 25% to account for an estimated 25% of participants that would have done
New impact Sprinkler replacing worn or leaking impact sprinkler	Reduce savings from 64.0 kWh to 3.4 kWh per sprinkler. Reduce incentive from \$3.00 to \$0.50 per sprinkler.	

New nozzle replacing worn nozzle of same design flow or less on existing sprinkler	Reduce savings from 36.0 kWh to 26.7 kWh per nozzle.	the maintenance in the absence of the program. Pacific Power savings values were estimated using the RTF workbook together with inputs applicable specifically to Pacific Power service territory (i.e. average well depth, ratio of groundwater to surface water pumping, average system pressure, etc.).
New gasket replacing leaking gasket, including mainline valve or section gasket, seal, or riser cap (dome disc)	Reduce savings from 23.0 kWh to 16.7 kWh per gasket.	
New drain replacing leaking drain	Reduce savings from 15.0 kWh to 10.8 kWh per drain.	
Cut and press or weld repair of leaking wheel line, hand line, or portable main line	Reduce savings from 65.0 kWh to 47.9 kWh per pipe repair. Reduce incentive from \$12.00 to \$8.00 per pipe repair.	
New or rebuilt wheel line leveler replacing leaking or malfunctioning leveler	Reduce savings from 6.0 kWh to 4.7 kWh per leveler. Reduce incentive from \$3.00 to \$1.00 per leveler.	
Low pressure sprinkler (e.g. rotating, wobbling, multi-trajectory spray) replacing impact sprinkler	Increase savings from 16.0 kWh to 29.4 kWh per sprinkler. Increase incentive from \$3.00 to \$4.00 per sprinkler.	
Low pressure sprinkler (e.g. rotating, wobbling, multi-trajectory spray) replacing worn low pressure sprinkler	Increase savings from 4.0 kWh to 11.7 kWh per sprinkler. Increase incentive from \$1.50 to \$2.00 per sprinkler.	
Pressure regulator	Reduce savings from 12.0 kWh to 11.7 kWh per sprinkler. Reduce incentive	

	from \$3.00 to \$2.00 per sprinkler.	
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Enhanced Incentives for Small Businesses – Lighting – Exhibit A, page 30-31		
Measure	Description of Change	Reason for Change
2x4 Troffer Retrofit to TLED (Lo-W) 3-lamp 2x4 Troffer Retrofit to TLED (Hi-W) 3-lamp LED High Bay/Low Bay Fluorescent to TLED ≤ 4-Lamp LED High Bay/Low Bay Fluorescent to TLED > 4-Lamp	Add new measures	Adding four new measures to eliminate gaps in measure coverage where certain types of retrofits are more common. The savings and measure costs will be calculated using the dual baseline calculation methodology in alignment with the other small business lighting LED measures.
Industrial Strip Kits w/ TLEDs LED High Bay/Low Bay Fixtures	Updating eligibility requirements	Updating industrial strip kit language to provide additional clarity regarding equipment eligibility. Updating eligibility requirements for high/low bay fixtures to provide an incentive option to replace/upgrade T8/T5HO fluorescent lamps in common high bay fixture applications.

Enhanced Incentives for Small Business – Non-Lighting – Exhibit A, page 31-32		
Measure	Description of Change	Reason for Change
Thermostat Reprogramming	Remove measures and make them ineligible for incentives.	There is no interest among approved small business contractors to provide this service.
Smart Plug Strips	Delete measure from the small business offer.	The original smart strip technology has been widely replaced by higher cost Bluetooth devices. The approved business contractors have had difficulty procuring the intended smart plug strips. This measure will still be available via the standard program available to customers regardless of size.

		It is also a direct install measure (see description below).
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Mid-Market Incentives – Exhibit A, page 32-33		
Measure	Description of Change	Reason for Change
A-19 Lamp < 8 W, Medium Base	Remove measures and make them ineligible for incentives.	Remove measures because the sunset date of 12/31/2019 will have passed in 2020.
A-19 Lamp ≥ 8 W, Medium Base		Note removal of these measures also aligns with Washington State House Bill 1444 requirements for general service lamps. The new standards effectively make LEDs the default technology for these technologies.
A-21 Lamp ≥ 12 W, Medium Base		
PAR Reflector Lamp	Remove sunset date for measures.	Remove 12/31/2019 incentive sunset date for these lamps. These lamp types are no longer considered general service lamps and will not be included in EISA standards.
BR Reflector Lamp		
Decorative Lamp		
Wall Pack Fixture with Occupancy Sensor	Remove measure and make it ineligible for incentives.	No participation is expected for this measure because this type of lighting product is no longer available with occupancy sensors. The occupancy sensor is available as an additional piece of equipment, but is not sold with wall pack fixtures.

Direct Install Incentives – Exhibit A, page 34		
Measure	Description of Change	Reason for Change
Smart Plug Strip	Add new measure for direct install smart plug strips	<p>These measures are being added to the program to allow program staff to install simple measures when they are already at a customer site. These measures can be completed quickly, and will provide additional energy savings.</p> <p>Program staff will only install plug strips on the Qualified Product List for the Office equipment Smart Plug Strip measure described above.</p> <p>Since this is a direct install measure, the customer will receive the installed smart plug strip and not a cash incentive.</p> <p>For program tracking purposes, the incentive will equal the measure cost. The measure cost will be the actual measure cost from purchase invoices. Labor costs are assumed to be zero since program</p>

		<p>staff is already on site and the installation time is expected to be short.</p> <p>The savings will be deemed savings obtained from the RTF.</p>
T8 TLED Lamp – Type A, A/B Dual Mode	Add new measures for direct install lighting measures	<p>These measures are being added to the program to allow program staff to install simple measures when they are already at a customer site. These measures can be completed quickly and will provide additional energy savings.</p> <p>Since this is a direct install measure, the customer will receive the installed lamp and not a cash incentive.</p> <p>For program tracking purposes, the incentive will equal the full cost of the lamp (measure cost).</p> <p>The savings will be calculated using the dual baseline calculation methodology consistent with the lighting retrofit offer.</p>
PAR Reflector Lamp		
BR Reflector Lamp		

Direct Install Overview

The Direct Install offerings will be limited to certain lamp types and smart plug strips. Program staff may install these equipment types while on site (e.g. during initial assessments or inspections). By only performing direct install measures during existing customer interactions, the offering will leverage resources without the need for additional labor. There will not be overlap between this and the typical smart plug strip and lamp measures, because these will be installed by program staff in situations and locations that the customer was not already planning to install the equipment (e.g. installing a small number of lamps in the front office of a warehouse that has performed non-lighting equipment upgrades). The inventory of direct install equipment will be managed by program staff, who will track serial numbers of smart plug strips and take photos of all equipment installations. These offerings are intended to lead to a small amount of additional savings while creating an enhanced customer experience and leading to more projects.

Vendor Incentives Overview

The program will offer vendor incentives for certain energy saving measures, as determined by Pacific Power, over the program year. These incentives will be outlined in E-blasts and distributed to vendors. These incentives and targeted E-blasts and one-on-one vendor support will help vendors encourage customers to install new technologies by helping to cover unforeseen or additional costs incurred by contractors.

Pacific Power is planning to continue vendor incentives established in 2019 to encourage the adoption of advanced networked lighting controls projects. This incentive gives qualified

contractors \$30 per fixture, up to \$5,000 total per project. Contractors can only receive this incentive for three projects. Pacific Power is considering additional measures to target beginning in Q1 of 2020, including Advanced Rooftop Unit Controls (ARC) to encourage regional contractors to become more familiar with the measure.

Regional Technical Forum (RTF) review

Updates to unit energy savings (UES) measures and standard protocols posted on the RTF website as of August 1, 2019 were reviewed for Wattsmart Business measures included in the program. The results of this review can be found in Exhibit B.

Transition Plan

For projects where pre-approval is required (e.g. lighting retrofits and custom non-lighting), the version of the program that applies is based on the incentive offer issue date.

For projects where pre-approval is not required, the version of the program is based on the equipment purchase order/invoice date for the first item(s) purchased for the project.

Cost-Effectiveness

Cost-effectiveness analysis for this set of changes is the same analysis provided with the 2020-2021 Business Plan and is attached as Exhibit C.

Exhibits Provided

Exhibit A – Wattsmart Business incentive tables and information – with changes from the current program (effective 1/1/2019) marked in redline form.

Exhibit B – Regional Technical Forum Alignment for Unit Energy Savings Measures and Protocols

Exhibit C – Cost-Effectiveness analysis