

PacifiCorp's Planned Changes to FinAnswer Express in Washington November 2011 (updated January 2012)

PacifiCorp is planning modifications to the FinAnswer Express business customer energy efficiency incentive program, which is offered through Schedule 115. The changes are intended to a) address updates needed to align with changes in markets, codes, standards, and third party specifications, b) increase overall participation and energy savings achieved through the program, and c) improve administration of the program. Consistent with the change process for the FinAnswer Express program documented and approved in Advice 06-008 (Docket UE-061710), notice of the changes will be posted on the program website¹ 45 days prior to implementation.

Background

The FinAnswer Express program is available to commercial, industrial, and agricultural customers in PacifiCorp's Washington service area and offers incentives for prescriptive measures which improve energy efficiency. The program also includes incentives for custom measures not listed in the program incentive tables. The current program offers incentives for lighting, motors, heating ventilation and air conditioning ("HVAC"), building envelope, food service equipment, appliances, irrigation, dairy/farm equipment, small compressed air, and other measures. Incentives are available for both retrofit projects and new construction/major renovation projects. This program began as Small Retrofit Incentive and Retrofit Incentive (Schedules 115 and 116) in November 2000 and was improved and renamed FinAnswer Express (Schedule 115) in May 2004. It was last modified November 20, 2010.

PacifiCorp retained a third party through a competitive bidding process to review the FinAnswer Express program and to provide recommendations for program improvement. The primary objectives of this review were to increase the level of energy savings achieved and to increase the comprehensiveness of the FinAnswer Express program. Several of the program modifications described herein have been informed by this review. The report prepared by the third party for the FinAnswer Express program is provided as Exhibit 1. The projections in the report are intended to capture the relative magnitude of changes resulting from the program changes for a typical year. Actual results in any given reporting period will be affected by customer access to capital, customer-specific business outlook, and other factors of which are not directly controllable by the Company.

Description of Planned FinAnswer Express Changes

The planned program changes are summarized in Table 1 below. For additional details, refer to the revised FinAnswer Express incentive tables, which are provided in Exhibit 2.² The exhibit contains the FinAnswer Express program incentive tables and definitions marked in redline form to show the planned changes. See Exhibit 1 for program details and additional background on the

¹ <http://www.pacificpower.net/wattsmart>

² For reference, the current program and incentive tables can be found at <http://www.pacificpower.net/bus/se/epi/washington/ilc/fe.html> for retrofits and <http://www.pacificpower.net/bus/se/epi/washington/nfmr/fe.html> for new construction/major renovation projects.

planned program changes. Consistent with Order 02 in Docket UE-100170, the Company plans to utilize deemed values from the Regional Technical Forum (RTF) where appropriate.³ Specific details by measure are provided in Appendix D of Exhibit 1.

Table 1
Summary of Planned Changes for Washington FinAnswer Express

Measure Category	Description of Change	Reason for Change
Retrofit Lighting	Decouple eligibility for incentives from the existing fixture and provide incentives based only on the fixture installed.	With the vast number of available fixture retrofit combinations, a growing number of retrofits do not meet the criteria necessary to qualify for prescriptive incentives. Providing incentives based on the fixture installed, regardless of the existing fixture, allows incentives to be more easily specified and expands the capabilities of the program to deal with a broader array of existing and proposed fixture types. The planned incentives for this program structure have been established commensurate with the current program for similar fixtures at an incentive rate based on average energy savings per fixture type from historical program data. Energy savings and measure costs for retrofit projects will continue to be reported based on the baseline and new lighting fixture inventories, hours of operation, and invoice costs using an updated version of the current retrofit lighting tool. Projects are required to save energy relative to a baseline lighting system to qualify for prescriptive incentives.
	Simplify the program eligibility requirements and incentive offering to pay incentives for many measures on a per lamp basis.	This simplifies the incentive table considerably, allows the incentive to scale with the increased fixture cost and energy savings associated with larger numbers of lamps, does not limit incentives to certain pre-defined lighting configurations, and provides greater flexibility for specifying energy-saving lighting configurations that qualify for prescriptive incentives.

³ Refer to sections 6(b) and 6(c) of the ordering section of Order 02.

Measure Category	Description of Change	Reason for Change
Retrofit Lighting (cont.)	Modify the eligibility requirements for 'premium efficiency' T8 fluorescents to match the High Performance/Reduced Wattage T8 lamp and ballast qualifying requirements of Consortium for Energy Efficiency (CEE).	Both the lamp and ballast must be CEE qualified, but they do not need to meet a qualifying combination. This flexibility will allow customers to choose the most appropriate combination for the space or application.
	Add a sunset date of July 14, 2012 for the standard T8 incentives. Enable management of the linear fluorescent baseline on the Company website.	Add a sunset date of July 14, 2012 for the standard T8 incentives to align with the effective date of new federal efficacy standards for General Service Fluorescent Lamps (GSFLs). Savings attributed to replacing T12 fixtures in retrofits will continue to be based on a T12 energy efficient lamp/energy efficient magnetic ballast combination for approximately 18 months following the sunset date to reflect that most projects will continue to be elective upgrades until such time that T12 lamps and ballasts have only limited availability. Approximately January 1, 2014, the FinAnswer Express program may revise the linear fluorescent baseline utilized for replacement of T12 lamps/ballasts. The revised baseline is expected to be a standard 32W T8 lamp with matching electronic ballast. The current linear fluorescent baseline for the program will continue to be listed on the program website.
	Remove the incentive offering for pulse-start metal halide fixtures 150 – 500W.	This change aligns equipment eligible for incentives with the Energy Independence and Security Act of 2007 mandate for a graduated phase-out on the manufacture and import of metal halide fixtures with ballasts that do not meet minimum ballast efficiency standards (i.e. most magnetic probe start ballasts).
	Add limited LED prescriptive measures to the program	To facilitate the improved administration of eligibility criteria, define the eligibility criteria for incentives using a list of qualifying fixtures maintained by a third party (DesignLights, ENERGY STAR and Lighting Design Lab).

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	Increase incentives for lighting control sensors, as well as add an additional incentive for each dimming ballast installed that is controlled by a sensor.	Since dimming ballasts cost 5-6 times more than standard or premium ballasts, providing an incentive to cover a portion of the required ballast should encourage greater adoption of lighting controls.
New Construction/ Major Renovation Lighting	Modify the New Construction/Major Renovation incentive to reflect a 'Pay for Savings' approach, relative to an appropriate baseline (usually defined by state energy code).	This will allow for increased flexibility, promote more creative lighting design, and not restrict new technologies as they become market ready.
	Add prescriptive incentives for New Construction Exterior Lighting utilizing Induction or LED technologies.	LED and induction technologies offer significant energy savings in exterior applications but have considerable cost premiums relative to industry standard lighting configurations. Exterior code requirements are site and application specific, so savings should be calculated based on the efficacy improvement of LED/Induction fixtures relative to lighting configurations currently in use.
Motors	Remove premium efficiency motor incentive table. Include note about incentive availability with the Other Motor Incentives table.	Incentives are no longer available for premium efficiency motors, so the table can be removed.
Motors	Remove the Electronically Commutated Motor (ECM) measure	This measure is in the current program for retrofits only. Section 1132.2 of the 2009 Washington State Energy Code dictates that those parts of systems which are altered or replaced shall comply with the provisions of Chapter 14. Motors are most commonly installed with new equipment or replaced upon unit failure, at which time installed motors less than 1hp installed in terminal fan units and refrigeration applications are required by code to be ECMs. With no opportunity for savings above code for this measure, it will be discontinued.

Measure Category	Description of Change	Reason for Change
HVAC	Align minimum efficiency requirements for Unitary air-conditioners and heat pumps >65,000 Btu/hr with revised CEE High-Efficiency HVAC Specifications	ANSI/AHRI Standard 340/360-2007 for unitary air-conditioners and heat pumps >65,000 Btu/hr phased out IPLV ratings on December 31, 2009 in favor of the Integrated Energy Efficiency Ratio (IEER) rating. In contrast to the IPLV rating, the IEER rating conditions are not fixed temperatures across all load conditions, but vary depending on the part load condition. CEE is in the process of reviewing their specification to replace IPLV values with appropriate IEER values, with a revised specification expected by the end of 2011. The program will align minimum efficiency requirements for unitary air conditioners and heat pumps with CEE's proposed specification (Tier 1 and Tier 2) and will update to the revised CEE specification (Tier 1 and Tier 2) when it becomes available. The program will align with any changes made by CEE to the specification over time. Units rated only with an IPLV may qualify for the listed incentives if the value meets or exceeds the minimum IPLV listed in the CEE's Commercial Unitary Air Conditioning and Heat Pump specification effective January 16, 2009. Minimum efficiency requirements to qualify for incentives will continue to be published on the program website.
	Reduce incentives for Unitary HVAC and Heat Pumps by \$25/ton	Reduce incentives for unitary HVAC equipment and PTACs by \$25/ton to align more closely with the incentives offered by other utility programs.
	Raise minimum efficiency requirements for PTAC and PTHP equipment higher than federal minimum efficiency requirements going into effect on September 30, 2012	Federal minimum efficiency requirements are increasing dramatically and the program should redefine eligibility criteria to be higher than required by federal regulation. Minimum eligibility requirements were defined such that approximately 25 – 50% of above-code equipment available in the marketplace would qualify for incentives and no equipment category would only have one qualifying manufacturer.

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	Limit incentives for occupancy based PTAC/PTHP controls to retrofit projects only	The 2009 Washington State Energy Code includes a provision mandating occupancy based PTAC/PTHP controls in lodging facilities with more than 50 rooms for new construction projects.
Other HVAC	Raise incentive level for evaporative cooling equipment	The incentive for evaporative coolers will be increased to \$0.06 per CFM. This level of approximately \$78 per ton is more in line with the incentives offered by other utilities.
Building Envelope	Modify minimum efficiency requirement for Windows	The WSEC 2009 requires a U-value of 0.32 for windows. This requirement was changed from 0.35 to 0.32 to ensure incentives are only offered for better than code equipment.
	Update measure costs for wall/roof insulation and windows to reflect updated data.	Update measure cost values for all envelope measures to reflect updated cost data available from the RTF.
Food Service	Add a Second High-Efficiency Tier with more stringent eligibility requirements and higher incentives for Electric Insulated Holding Cabinets, Electric Steam Cookers, Electric Griddles and Electric Commercial Fryers	Products are available that exceed the minimum requirements established by the ENERGY STAR specification. Higher incentives should encourage customers to consider purchasing the most efficient ENERGY STAR rated commercial kitchen cooking equipment available.
	Modify the minimum efficiency requirement for Electric Combination Ovens	Modify the minimum efficiency requirement to align with the RTF.
	Discontinue offering incentives for beverage machine occupancy sensors and replace it with a new measure for high-efficiency refrigerated beverage vending machines until federal code changes in 2012.	Currently, ENERGY STAR maintains a specification for Refrigerated Vending Machines, and the Code of Federal Regulations includes requirements for refrigerated vending machines that go into effect August 31, 2012. Since the ENERGY STAR specifications are not as stringent as the upcoming pending federal efficiency requirements, it is recommended that the federal efficiency regulations be the minimum efficiency requirement to be eligible for an incentive until the regulations become effective. At that time, incentive for this measure will be discontinued.

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	Discontinue offering incentives for refrigerated display occupancy sensors and replace it with a new measure for occupancy sensors in refrigerated cases with LED lighting.	The current Refrigerated Display Occupancy sensor offering is limited to refrigerated display cabinets containing non-perishable canned or bottled beverages where savings potential is the greatest. Offering incentives for Refrigerated Case Occupancy Sensors that shut-down lighting systems when the surrounding space is unoccupied expands the number of eligible display cabinets to include those containing any product type, and both freezer and refrigerator cabinets.
Appliances	Update minimum efficiency requirements for high-efficiency clothes washers	These updates are based on revisions to high-efficiency specifications maintained by ENERGY STAR and CEE.
Appliances, Food Service, HVAC (residential equipment used in a business)	Align minimum efficiency requirements and incentive levels for residential appliances (used in a business) to the Home Energy Savings program.	This allows the program to remain consistent with the Home Energy Savings program as it evolves. Note there are measures for residential equipment used in a business in the Appliances, Food Service and HVAC incentive tables.
	Discontinue offering incentives for Ceiling Fans	Federal manufacturing standard requires all ceiling fans with lighting kits to have ENERGY STAR qualified lighting included. Also, the only savings that can be attributed to installing a high efficiency ceiling fan over a baseline ceiling fan are the savings attributed to the high efficiency motor, which are extremely small (6 kWh/yr). This measure is also being removed from the Home Energy Savings program.
Irrigation	Add Irrigation Pump VFDs to the program as a measure with an incentive based on annual energy savings.	To streamline delivery of technical analysis currently offered by PacifiCorp through the Energy FinAnswer program, the Irrigation Pump VFD measure will be adopted as a FinAnswer Express measure with an incentive rate of \$0.12/kWh annual energy savings. Program administrators will use a simplified analysis tool to compute energy savings based on either measured or assumed site-specific operating parameters, similar to BPA and Energy Trust of Oregon. Due to the wide variability of energy savings that may result from irrigation pump VFD's depending on application, pump type, and irrigation

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		application, there will be minimum eligibility criteria established and posted on the program website for this measure in FinAnswer Express (e.g. specific system attributes, minimum savings threshold in terms of percentage or kWh/yr/hp, or simple payback before incentive criteria).
	Modify limit of “2 per acre” in place for some irrigation measures	Deemed savings values are calculated based on the assumption that replacement equipment will be installed on mobile irrigation systems (wheel lines, hand lines, pivots, or linears), not fixed-in-place or “solid set” systems. This is the origin of the current program limitation that constrains eligibility to 2 sprinklers, regulators, nozzles, gaskets, or drains per acre of irrigated land. The 2 per acre limitation will be removed and eligibility requirements be restated directly so that incentives for these measures are not available for fixed-in-place systems.
	Modify eligibility criteria for Brass Impact Sprinklers to include other types of Impact Sprinklers	Impact sprinklers may be constructed of materials other than brass and will save energy and qualify for incentives.
Dairy/Farm	Revise the eligibility criteria for Automatic Milker Take-Offs	Revise the eligibility criteria for Automatic Milker Take-Offs to clarify that replacements of existing automatic milker take-offs are not eligible for incentives, and that a VFD must be present on the vacuum pump and adjust pump speed relative to vacuum demand. These clarifications are consistent with the original intent of this measure and are required based on experience with this measure.
Compressed Air	Revise the eligibility requirement for post-purchase prescriptive incentives to include any compressed air system with a total operating capacity of 75 horsepower or less.	In the current program, eligibility for post-purchase prescriptive incentives is restricted to systems with a single compressor with operating capacity less than or equal to 75 hp. Based on feedback from program participants, vendors, and administrators, eligibility will be revised to include any compressed air system with a total operating capacity of 75 horsepower or less. Multiple compressor configurations are allowed, except for the VFD-controlled compressor measure, where

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		eligibility will continue to be limited to systems with a <u>single</u> operating compressor with capacity less than or equal to 75 hp. (Projects with compressor systems larger than 75 hp or multiple compressors will continue to receive services under Energy FinAnswer.)
	Revise the eligibility for Zero-Loss Drains	Revise the eligibility for Zero-Loss Drains so there is no limitation on compressor size to be eligible for incentives. In the current program, eligibility for post-purchase prescriptive incentives is restricted to systems with a single compressor with operating capacity less than or equal 75 hp. Based on feedback from program participants, vendors, and administrators, eligibility will be revised to remove the maximum system size for this measure. The operating characteristics and energy savings from zero loss drains are independent of compressor size and a restriction on eligibility based on compressor size unnecessarily limits participation.
Office/Other	Update reported savings for Smart Plug Strips and Network Power PC Management Software	These updates are based on revised data from the RTF.
Incentive cap	Increase the project cost cap from 60% to 70%	This adjustment mirrors the planned adjustment to the Energy FinAnswer project cost caps.
Other	In addition to the changes summarized in Table 1, the planned changes include some minor language changes.	

Cost Effectiveness

The cost effectiveness analysis, provided as Exhibit 3, contains the projected cost effectiveness for the program with the planned changes. Results are provided at the program and measure group level. Based on this analysis, the program with the planned changes is expected to be cost-effective.

The FinAnswer Express program will continue to be funded through the System Benefits Charge. No adjustment to the System Benefits Charge is proposed at this time.

Exhibits Provided

Exhibit 1 – FinAnswer Express Market Characterization and Program Enhancements report

Exhibit 2 – FinAnswer Express incentive tables and definitions – with changes from the current program marked in redline form.

Exhibit 3 – Cost-Effectiveness Analysis