PACIFIC POWER
A DIVISION OF PACIFICORP

825 NE Multnomah, Suite 2000
Portland, Oregon 97232

September 18, 2009

VIA ELECTRONIC FILING

Washington Utilities and Transportation Commission
1300 S. Evergreen Park Drive SW
P.O. Box 47250
Olympia, WA 98504-7250

Attention: David W. Danner
Executive Director and Secretary

RE: **Advice No. 09-04**
Proposed Changes to Schedule 115 - Commercial & Industrial Energy Efficiency Incentives - Optional for Qualifying Customers and Schedule 125 - Commercial & Industrial Energy Services - Optional for Qualifying Customers

Dear Mr. Danner:

Pursuant to RCW 80.28.050, RCW 80.28.060 and WAC 480-80-121(1), PacifiCorp, d.b.a. Pacific Power, ("PacifiCorp" or "Company") submits for filing the following tariff sheets which are attached to this filing as Attachment C. The Company respectfully requests the proposed tariff revisions become effective October 30, 2009.

Sixth Revision of Sheet No. 115.1	Schedule 115	Commercial & Industrial Energy Efficiency Incentives - Optional For Qualifying Customers
Seventh Revision of Sheet No. 125.1	Schedule 125	Commercial & Industrial Energy Services – Optional For Qualifying Customers
Sixth Revision of Sheet No. 125.3	Schedule 125	Commercial & Industrial Energy Services – Optional For Qualifying Customers
Sixth Revision of Sheet No. 125.4	Schedule 125	Commercial & Industrial Energy Services – Optional For Qualifying Customers
Sixth Revision of Sheet No. 125.5	Schedule 125	Commercial & Industrial Energy Services – Optional For Qualifying Customers

The purpose of this filing is to propose enhancements to the Company's FinAnswer Express (Schedule 115) and Energy FinAnswer (Schedule 125) business customer energy efficiency programs. The proposed changes are summarized below:

FinAnswer Express (Schedule 115)

- The addition of new measures and new measure categories
- Changes to existing measures
- The introduction of new incentives and increases in incentive levels
- The addition of certain schedules to the Applicability section of the tariff
- The elimination of some measures

Energy FinAnswer (Schedule 125)

- An increase in incentive levels
- The addition of certain schedules to the Applicability section of the tariff
- Enhancement of certain program definitions

The changes proposed in this filing are intended to: a) increase overall participation and energy savings achieved by the FinAnswer Express and Energy FinAnswer programs, b) increase the comprehensiveness of the FinAnswer Express prescriptive offering, c) incorporate changing codes and standards,[1] and d) improve administration of the programs.[2]

Table 1 below provides a summary of FinAnswer Express and Energy FinAnswer program results for 2008 compared to estimated program results reflecting the modifications proposed in this filing.

Table 1[3]
Summary of Current and Proposed Energy FinAnswer and FinAnswer Express Programs

	Current Programs 2008 Results	Proposed Programs
kWh/yr savings	26,796,120	29,219,035
Total utility costs ($/yr)	3,449,082	4,442,916
Estimated $/kWh	0.13	0.15
% increase in savings over 2008	n/a	9%

[1] Detail on the codes and standards incorporated are provided in Workpaper A.
[2] The changes proposed in this filing are expected to increase expenditures for the FinAnswer programs and the Company is preparing to file a request to increase the System Benefits Charge to help fund these changes. Please see PacifiCorp Advice filing No. 09-05.
[3] Current program data is as reported in the Company's 2008 DSM annual report. Proposed program data is estimated and reflects a full year with the proposed changes. KWh/yr savings reflects gross savings at generation (prior to net-to-gross adjustment and including line losses).

Background

The FinAnswer Express program (Schedule 115) is available to commercial and industrial customers and offers incentives for prescriptive measures which improve energy efficiency. The program also includes custom incentives for customer measures not listed in the program incentive tables. The current program offers incentives for lighting, motors, heating ventilation and air conditioning ("HVAC"), cool roofs, and a short list of other measures. Incentives are available for both retrofit projects and new construction/major renovation projects. The FinAnswer Express program was first approved by the Commission in its current form as a prescriptive incentive program in 2004 in Docket No. UE-040608. Prior to the approval of the FinAnswer Express program, similar measures were offered through the Small Retrofit Incentive and Large Retrofit Incentive programs, which were approved by the Commission in 2000 in PacifiCorp's advice filing No. 00-009.

The Energy FinAnswer program (Schedule 125) was approved by the Commission as an incentive-based program in 2000 in PacifiCorp's advice filing No. 00-009. This program, also available to commercial and industrial customers, offers energy engineering services and incentives which assist customers in improving the energy efficiency of their facilities. Program services and incentives are offered for both retrofit projects and new construction/major renovation projects.

PacifiCorp retained Nexant, Inc. through a competitive bidding process in December 2007 to review the FinAnswer Express and Energy FinAnswer programs and to provide recommendations to improve the programs. The primary objective of Nexant's study was to increase the level of energy savings achieved by the FinAnswer Express and Energy FinAnswer programs. Several of the program modifications proposed by the Company in this filing have been informed by the Nexant study. The study reports provided by Nexant for the FinAnswer Express and Energy FinAnswer programs are provided as workpapers to this filing. The FinAnswer Express Market Characterization and Program Enhancements report is provided as Workpaper A and the 2008 Energy FinAnswer Market Characterization and Program Enhancements report is provided as Workpaper B.[4]

FinAnswer Express Proposed Changes (Schedule 115)

New Prescriptive Energy Efficiency Measures and Changes for Existing Measures

In its study described above, Nexant characterized the market for 112 potential new prescriptive measures, reviewed the 62 existing FinAnswer Express measures and updated deemed costs. Based on this study, Nexant made recommendations to improve and enhance the FinAnswer

[4] The market characterization work was substantially complete prior to significant changes in the economy and stimulus funding availability. The projections in the two market characterization reports are intended to capture the relative magnitude of changes resulting from the proposed program changes for a typical year. Results in any given reporting period will be based on customer access to capital, customer-specific business outlooks, and other factors.

Express program[5]. Based on Nexant's recommendations, PacifiCorp proposes modifications to the FinAnswer Express program which include new prescriptive energy efficiency measures, including new measure categories, and changes for some existing measures. The proposed modifications are summarized below with complete details provided in the revised FinAnswer Express incentive tables, which are provided in Attachment D to this filing.[6] Consistent with the flexible tariff format approved in Docket No. UE-061710 for the FinAnswer Express program, notice of the proposed changes will be posted 45 days prior to the requested effective date of this filing.

Provided below are examples of the new prescriptive measures proposed by the Company in this filing.

Proposed new measures for existing measure categories:

- Lighting - LED case lighting for refrigerated cases, new fixture sizes
- Lighting controls - daylighting controls, bi-level fixtures with occupancy sensors
- Motors - expand to include premium efficiency motors up to 500 horsepower to align with current National Electrical Manufacturers Association premium size categories, add Green Motor rewind measure to align with regional efforts
- HVAC - ground/groundwater source heat pumps, indirect/direct evaporative cooling, programmable thermostats for portable classrooms
- Building envelope - roof/attic and wall insulation, windows, window film
- Other - network PC power management software

Proposed new measure categories:

- Food service - dishwashers, cooking equipment, ice machines, refrigerators
- Appliances - ceiling fans, clothes washers, room air conditioners, water heaters
- Irrigation - nozzles, brass-impact sprinklers, wheel line levelers and feed hoses
- Farm equipment - common dairy efficiency measures, high-efficiency ventilation
- Compressed air - air compressor variable frequency drives, added receiver capacity

The proposed new measures and measure categories will increase the comprehensiveness of the program for PacifiCorp customers, thereby increasing the energy savings achieved through the program. Additionally, these modifications are intended to align the FinAnswer Express program with other incentive programs offered in the region. The FinAnswer Express Market Characterization and Program Enhancements report (provided as Workpaper A) includes detail on efforts to coordinate the proposed program modifications with other incentive programs in the

[5] Nexant's recommendations for the FinAnswer Express program are detailed in the workpapers submitted with this filing. Specifically, refer to Workpaper A.

[6] Attachment D, originally filed by the Company in Advice No. 06-008, contains the FinAnswer Express program incentive tables and definitions. The incentive tables are marked to show changes from the current program that are proposed in this filing.

region and with the work of organizations such as Consortium for Energy Efficiency ("CEE"), Energy Star, and the National Electrical Manufacturers Association ("NEMA").

Increase in Incentive Levels for FinAnswer Express

The FinAnswer Express and Energy FinAnswer programs are designed to operate together in the marketplace with an incentive differential that reflects the unique characteristics of the two programs. As described below, the company is proposing an increase to the incentives offered by the Energy FinAnswer program. To retain a similar incentive differential between the two programs going forward, the Company is proposing to increase incentive levels for many of the FinAnswer Express lighting measures and for FinAnswer Express custom measures.

The proposed incentive levels for the lighting measures are provided in Attachment D. Additional information on the proposed lighting measure incentives can be found in Workpaper A. The Company is also proposing modifications to the incentives offered for custom measures. Custom measure incentives represent a relatively small part of the overall program and allow the Company to provide a comprehensive offering to smaller facilities and lighting only projects. The proposed revision is to increase the custom incentive per kWh annual energy savings from $0.08 to $0.10 and to increase the project cost cap from 50% to 60%. These increases are aligned with other proposed incentive increases and helps retain the current incentive differential between the FinAnswer Express and Energy FinAnswer programs.

Other Changes for FinAnswer Express

In addition to the changes described above, the Company is also proposing to:

- Add Schedules 33, 47T, and 53 to the Applicability section of Schedule 115. Customers who take service under these schedules are able to benefit from the program and also pay the System Benefits Charge (Schedule 191).
- Remove two programmable thermostat measures due to changes in code requirements and Energy Star standards.
- Add two new incentive tiers for HVAC equipment and a December 31, 2009 sunset date for some existing HVAC equipment measures to align with federal equipment standards changes that become effective January 1, 2010[7].

Table 2 below illustrates 2008 program year performance for the FinAnswer Express program and compares that to anticipated program results reflecting the proposed program modifications in this filing.

[7] On January 1, 2010, federal efficiency standards and Washington State Energy Code for many commercial air-cooled air conditioners and heat pumps will increase, matching the existing FinAnswer Express incentive program minimum efficiency requirement. To align the program with these changes, the Company is proposing in this filing to add two new tiers (CEE Tiers 2 and 3) and to sunset the existing tier (CEE Tier 1) as of December 31, 2009 for equipment that will be required by federal efficiency standards and Washington State Energy Code as of January 1, 2010.

Table 2: Current and Proposed FinAnswer Express Program Data

	Current program	Proposed program
kWh/yr savings	5,772,387	6,937,411
Total utility costs ($/yr)	$ 752,471	$ 1,117,433
Estimated $/kWh	$ 0.13	$ 0.16
% increase in savings over 2008	n/a	20%

Energy FinAnswer Proposed Changes (Schedule 125)

Increase in Incentive Levels

The Company is proposing to increase the incentive levels offered by the Energy FinAnswer program in an effort to continue to increase program participation and energy savings achieved. The proposed increase in incentive levels, shown below in Table 3, is expected to result in a 6% increase in savings compared to 2008 Energy FinAnswer results[8].

Table 3: Current and Proposed Energy FinAnswer Incentive Levels

	Incentive Formula	Project Incentive Caps	
Current	$0.12/kWh + $50/KW	50% of project cost	1 year payback
Proposed	$0.15/kWh + $50/KW	60% of project cost	1 year payback

The 2008 Energy FinAnswer Market Characterization and Program Enhancements report prepared by Nexant (provided as Workpaper B) informed the Company's decision to increase incentive levels for Energy FinAnswer in this filing. Provided below are key elements from the report which influenced the Company's decision regarding the proposed incentive levels:

- Review of other utility programs – Nexant reviewed other utility programs and analyzed the combined effect of incentive levels and electric rates on project payback periods using PacifiCorp project data. This study showed that PacifiCorp's current Energy FinAnswer incentive levels combined with the Company's relatively low energy rates

[8] The analysis in Nexant's report on the Energy FinAnswer program (Workpaper B) includes projections for three scenarios for the proposed Energy FinAnswer program changes. The low savings scenario assumes 10% of open projects close as a result of higher incentives and an additional 5% of annual savings is achieved through new projects. The medium savings scenario assumes 25% of open projects close and an additional 10% of annual savings from new projects. The high savings scenario assumes 25% of open projects close and an additional 25% of annual savings from new projects. The range of savings across these scenarios spans from an increase of 6% to 27% over 2008 Energy FinAnswer results. The cost effectiveness results for the Energy FinAnswer program, provided as Attachment F to this filing, assume savings of 6%.

result in project payback periods that are longer than the average of ten other utilities with comparable programs.
- Review of three studies that addressed the impacts of increased utility incentives on energy savings results.
- Review of market barriers for program participation.

Below are other factors that the Company considered in determining the proposed incentive levels for the Energy FinAnswer program:

- Recently, many utilities and energy efficiency organizations have increased incentive levels for programs similar to Energy FinAnswer.
- The proposed increase in the project cost cap from 50% to 60% balances the need for robust utility incentives and the potential availability of incentives/funding from other sources[9] and helps ensure customers continue to have a vested interest in their projects and project costs.
- For individual customers, the Company has observed a general trend from implementing the most simple and cost-effective projects to implementing increasingly complex and expensive projects. The Company is increasingly working on the more complex projects, and higher incentive levels support efforts to complete these projects.

PacifiCorp believes that some project incentives should continue to be limited by a project cost cap[10] for the following reasons:

- When customers share in the cost of a project, in general they are more likely to engage in efforts to retain the energy savings over time.
- To ensure the optimal use of program funding, incentives should be set at a level which balances the objective of incentivizing customers to invest in energy efficiency projects with the objective of not offering more of an incentive than is necessary to encourage customers to build projects. The project cost cap assists with this objective.
- The closer that a utility offered incentive for an energy efficiency project reaches 100% of project costs, the more likely it is that a customer will be disinterested in managing and controlling the costs of the project.
- The program design of Energy FinAnswer is not suited for measures that pay the entire cost of energy efficiency projects. To make significant changes to the project cost cap (e.g. increasing it to 100%), the Company would need to reconsider the program design of the Energy FinAnswer program.

[9] Potential sources of additional funding include funds made available by the American Recovery and Reinvestment Act of 2009.
[10] For details on which types of projects the cost cap applies to, refer to Table 1 on Schedule 125 sheet 5.

Other Changes for Energy FinAnswer

In addition to increasing Energy FinAnswer incentive levels, the Company is proposing the following:

- Remove the 75% lighting savings cap for the design assistance program track for new construction/major renovation projects.
- Add Schedules 33 and 47T to the Applicability section of the program tariff. Customers who take service under these schedules are able to benefit from the program and also pay the System Benefits Charge (Schedule 191).
- Add to the definition of Energy Efficiency Measure (EEM) Cost to better coordinate our incentives with natural gas company incentives.

Table 4 below illustrates 2008 program year performance for the Energy FinAnswer program and compares that to anticipated program results for the proposed program modifications in this filing.

Table 4: Current and Proposed Energy FinAnswer Program Data

	Current program (2008 results)	**Proposed program**
kWh/yr savings	21,023,732	22,281,623
Total utility costs ($/yr)	$ 2,696,611	$ 3,325,483
$/kWh	$ 0.13	$ 0.15
% increase in savings over 2008	n/a	6%

Cost Effectiveness

The FinAnswer Express and Energy FinAnswer programs are expected to remain cost effective with the proposed changes. Provided as Attachment E is the cost effectiveness analysis prepared by the Cadmus Group for the FinAnswer Express program. Attachment F provides the cost effectiveness analysis prepared by the Cadmus Group for the Energy FinAnswer program.

The programs will continue to be funded by revenue from the Schedule 191 System Benefits Charge.

It is respectfully requested that all formal correspondence and Staff requests regarding this filing be addressed to:

By E-mail (preferred): datarequest@pacificorp.com

By regular mail: Data Request Response Center
PacifiCorp
825 NE Multnomah Blvd., Suite 2000
Portland, OR 97232

Informal questions should be directed to Cathie Allen, Regulatory Manager, at 503-813-5934.

Sincerely,

Andrea L. Kelly/ca

Andrea L. Kelly
Vice President, Regulation

Enclosures

Attachments
Attachment A: Notice
Attachment B: Summary Page of Tariffs
Attachment C: Tariffs
Attachment D: FinAnswer Express Program Incentive Tables and Definitions
Attachment E: Cost Effectiveness Results for FinAnswer Express Program
Attachment F: Cost Effectiveness Results for Energy FinAnswer Program

Workpapers
Workpapers A: Nexant's Recommendations for FinAnswer Express Program
Workpapers B: Nexant's Recommendations for Energy FinAnswer Program

ATTACHMENT A

NOTICE
PACIFIC POWER

Pursuant to Washington Law (including without limitation RCW 80.28.050 and –060) and the Washington Utilities and Transportation Commission's ("Commission") Rules & Regulations (including without limitation WAC 480-80-121), Pacific Power has filed with the Commission an original tariff schedule for electric service in the State of Washington.

Overview

The purpose of this filing is to revise Pacific Power's currently effective Commercial and Industrial Energy Efficiency Incentives – Optional for Qualifying Customers, Schedule 115, and Commercial and Industrial Energy Services – Optional for Qualifying Customers, Schedule 125.

The changes proposed in this filing are intended to a) increase overall participation and energy savings achieved by the FinAnswer Express and Energy FinAnswer programs, b) increase the comprehensiveness of the FinAnswer Express prescriptive offering, c) incorporate changing codes and standards, and d) improve administration of the programs.

Unless suspended by the Commission, these tariffs will become effective October 30, 2009.

DATED: September 18, 2009

PACIFIC POWER

By Andrea L. Kelly /ca
Andrea L. Kelly
Vice President, Regulation

ATTACHMENT B

Attachment B

The proposed tariff sheets to be revised in the Company's currently effective Tariff WN-U-74 are designated as follows:

Sixth Revision of Sheet No. 115.1	Schedule 115	Commercial & Industrial Energy Efficiency Incentives - Optional For Qualifying Customers
Seventh Revision of Sheet No. 125.1	Schedule 125	Commercial & Industrial Energy Services – Optional For Qualifying Customers
Sixth Revision of Sheet No. 125.3	Schedule 125	Commercial & Industrial Energy Services – Optional For Qualifying Customers
Sixth Revision of Sheet No. 125.4	Schedule 125	Commercial & Industrial Energy Services – Optional For Qualifying Customers
Sixth Revision of Sheet No. 125.5	Schedule 125	Commercial & Industrial Energy Services – Optional For Qualifying Customers

ATTACHMENT C

ATTACHMENT D

Washington FinAnswer Express

This document includes the following three sections:

- Definitions of terms used in Schedule 115 and other program documents
- Incentives – General Information
- Incentive tables

Definitions

Commercial Building: A structure that is served by Pacific Power and meets the applicability requirements of Washington Schedule 115, the program tariff, on file with the Washington Utilities & Transportation Commission at the time an Energy Efficiency Incentive Agreement is executed or an Energy Efficiency Incentive Application is submitted and which does not meet the definition of an Industrial Facility.

Customer: Any party who has applied for, been accepted and receives service at the real property, or is the electricity user at the real property.

Energy Efficiency Incentive: Payments of money made by Pacific Power to Owner or Customer for installation of an Energy Efficiency Measure pursuant to an executed Energy Efficiency Incentive Agreement or approved Energy Efficiency Incentive Application.

Energy Efficiency Incentive Agreement: An agreement between Owner or Customer and Pacific Power providing for Pacific Power to furnish Energy Efficiency Incentives for an Energy Efficiency Project.

Energy Efficiency Incentive Application: An application submitted by Owner or Customer to Pacific Power for Energy Efficiency Incentives.

Energy Efficiency Measure (EEM): A permanently installed measure which can improve the efficiency of the Customer's electric energy use.

Energy Efficiency Measure (EEM) Cost:
• New Construction/Major Renovation: EEM Cost is the total installed cost of energy efficiency equipment or system minus the cost of the code compliance/common practice equipment or system.
• Retrofit: EEM Cost is the total installed cost of the energy efficiency equipment or modification. In the case of New Construction, Major Renovations, and Retrofits, EEM Costs shall mean the Owner or Customer's reasonable costs incurred (net of any discounts, rebates or incentives other than Energy Efficiency Incentives from Pacific Power, or other consideration that reduces the final actual EEM Cost incurred by the Owner or Customer) to purchase and install EEMs at the Owner's or Customer's facility. If the Owner or Customer installs the EEM then the cost of installation shall be equal to the Owner's or Customer's actual labor costs for such installation.

Energy Efficiency Project: One or more EEM(s) with similar one year payback limitations (see below) covered by one Energy Efficiency Incentive Agreement.

Energy Efficiency Project Cost: The sum of EEM Costs for one or more EEM(s) with similar one year payback limitations (see below) covered by one Energy Efficiency Incentive Agreement.

Industrial Facility: Buildings and process equipment associated with manufacturing.

Major Renovation: A change in facility use type or where the existing system will not meet Owner/Customer projected requirements within existing facility square footage.

Mixed Use: Buildings served by a residential schedule and a rate schedule listed under **Applicable** in Washington Schedule 115 shall be eligible for services under this schedule provided the Energy Efficiency Project meets the definition of New Construction or Major Renovation.

New Construction: A newly constructed facility or newly constructed square footage added to an existing facility.

Owner: The person who has both legal and beneficial title to the real property, and is the mortgager under a duly recorded mortgage of real property, the trustor under a duly recorded deed of trust.

Retrofit: Changes, modifications or additions to systems or equipment in existing facility square footage.

Incentives – General Information

Prescriptive incentives
Per unit incentives are listed in the program incentive tables for specific Energy Efficiency Measures (EEMs) and are subject to the incentive caps below. Incentives are subject to change and current incentives can be found at www.pacificpower.net.

Custom incentives
Energy Efficiency Measures not listed in the incentive tables may be eligible for a Custom Energy Efficiency Incentive. Pacific Power will complete an analysis of the EEM Cost and electric energy savings and determine whether to offer a custom Energy Efficiency Incentive and the incentive amount. The custom Energy Efficiency Incentive is Pacific Power's estimate of annual electric savings multiplied by $0.~~08~~10/kWh and subject to the incentive caps described below.

Electric savings resulting from lighting interaction with mechanical equipment is not eligible for a custom Energy Efficiency Incentive.

The baseline wattage for all retrofit fluorescent lighting EEMs not listed in the Retrofit Lighting Incentive Table is the lesser of
a) Existing equipment, or
b) Energy efficient magnetic ballast and energy saving lamp combination.

Pacific Power may adjust baseline electric energy consumption and costs to reflect any of the following: energy codes, standard practice, changes in capacity, changes in production or facility use and equipment at the end of its useful life. Such adjustments may be made for lighting energy efficiency measures installed in new construction projects where energy code does not apply.

Incentive caps

-	~~Measures Listed in Incentive Tables~~				~~Measures Receiving Custom Incentive~~
-	~~Lighting~~				
-	~~Retrofit~~	~~NC/MR~~	~~Motors~~	~~Mechanical/Other~~	
~~Percent of project cost cap~~	~~50%~~	~~None~~	~~None~~	~~None~~	~~50%~~
~~1 year simple payback cap for project~~	~~Yes~~	~~No~~	~~No~~	~~No~~	~~Yes~~

	Percent of Energy Efficiency Project Cost Cap	1 Year Simple Payback Cap for Energy Efficiency Projects
Measures Listed in Incentive Tables		
Lighting - Retrofit	60%	Yes
Lighting - New Construction/ Major Renovation	None	No
Motors	None	No
HVAC	None	No
Building Envelope	None	No
Food Service	None	No
Appliances	None	No
Irrigation (see note)	None	No
Dairy/Farm Equipment	None	No
Compressed Air	None	No
Other Energy Efficiency Measures (see note)	None	No
Measures Not Listed in Incentive Tables		
Lighting - New Construction/ Major Renovation Measures Receiving a Custom Incentive)	None	No
Other Measures Receiving a Custom Incentive	60%	Yes

1. The 1 year simple payback cap means Energy Efficiency Incentives will not be available to reduce the simple payback of an Energy Efficiency Project below one year. If required, individual EEM Energy Efficiency Incentives will be adjusted downward pro-rata so the Energy Efficiency Project has a simple payback after incentives of one year or more.
2. EEM Costs are subject to Pacific Power review and approval and Pacific Power may require additional documentation from the Customer or Owner.
3. Two irrigation Energy Efficiency Measures have a measure cost cap. See the Irrigation Equipment incentive table for details.
4. The Network PC Power Management Software measure has a measure cost cap. See the Other Energy Efficiency Measures incentive table for details.

Retrofit Lighting Incentive Table

Category	Replace	With	Retrofit Incentive
Fluorescent Fixture Upgrade to Standard T8 Fixtures [Standard T8 lamps and electronic ballasts with ballast factor (BF) ≤0.88]	4' - 1 or 2 T12 lamp(s) + 1 magnetic ballast (MB)	4'- 1 or 2 T8 lamps + 1 electronic ballast (EB)	$~~5~~6
	4' - 3 or 4 T12 lamp(s) + MB(s)	4' - 3 or 4 T8 lamps + EB	$~~10~~12
	8' - 1 or 2 T12 lamp(s) + MB(s)	4'- 2, 3 or 4 T8 lamps + EB	$~~10~~12
	8'- 1,2,3 or 4 T12 lamps + MB(s)	8' - 1,2,3 or 4 T8 lamps +EB	$~~10~~12
	8'- 1,2,3 or 4 T12 HO/VHO lamps + MB(s)	8' - 1,2,3, or 4 T8 HO/VHO lamps + EB(s)	$~~15~~18
Fluorescent Fixture Upgrade to 4' Premium T8 Fixtures [Lamps with initial lumens ≥3100 or wattage ≤30 W; electronic ballasts with BF ≤0.8]	4' - 1 or 2 T12 lamp(s) + MB or Standard T8 lamp(s) + EB	4' - 1 or 2 Premium T8 lamp(s) + EB	$~~10~~12
	4' - 3 or 4 T12 lamps + MB(s) or Standard T8 lamps + EB	4' - 3 or 4 Premium T8 lamps + EB	$~~15~~18
	8' - 1 or 2 T12 lamp(s) + MB(s)	4' - 2, 3 or 4 Premium T8 lamps + EB	$20
Fluorescent Delamping and Standard T8 Fixture Upgrade [Standard T8 lamps and electronic ballasts (EB) with BF ≤0.88 - Fixture removal is not eligible]	4' - 2 T12 lamps + MB	4' - 1 Standard T8 lamp + EB	$~~10~~12
	4' - 3 T12 lamps + MB(s)	4' - 2 or 1 Standard T8 lamp + EB	$~~15~~18
	4' - 4 T12 lamps + MB(s)	4' - 3 Standard T8 lamps + EB	$~~15~~18
	4' - 4 T12 lamps + MB(s)	4' - 2 or 1 Standard T8 lamp + EB	$~~25~~30
Fluorescent Delamping and Premium T8 Fixture Upgrade [Lamps with initial lumens ≥3100 or wattage ≤30 W; electronic ballasts with BF ≤0.8. Fixture removal is not eligible]	4' - 2 T12 lamps + MB	4' - 1 Premium T8 lamp + EB	$~~15~~18
	4' - 3 T12 lamps + MB(s)	4' - 1 or 2 Premium T8 lamp + EB	$~~20~~24
	4' - 4 T12 lamps + MB(s)	4' - 3 Premium T8 lamps + EB	$~~20~~24
	4' - 4 T12 lamps + MB(s)	4' - 1 or 2 Premium T8 lamp + EB	$~~30~~35
T8 Fluorescent Lamp Upgrade	≥ 32 W T8 lamp	≤ 30 W T8 lamp	$0.50
Compact Fluorescent Lighting (CFL)	Incandescent	<10W (nominal) CFL hardwire fixture	$10
	Incandescent	≥10W and < 20W (nominal) CFL hardwire fixture	$15
	Incandescent	≥20W (nominal) CFL hardwire fixture	$20
T5 Fluorescent Fixture Upgrade	≥250 W MH, MV or HPS	3 T5HO lamps (nominal 4') + EB (High Bay)	$70
	≥ 400 W MH, MV, or HPS	4,5, or 6 T5HO lamps (nominal 4') + EB (High Bay)	$75
	≥ 750 W MH, MV, or HPS	≥8 T5HO lamps (nominal 4') + EB(s)	$110
	4' - 4 T12 lamps + MB(s)	2 T5 lamps (nominal 4') + EB (interior fixtures)	$30
	4' - 4 T12 lamps + MB(s)	2 T5HO lamps (nominal 4') + EB (interior fixtures)	$25

Category	Replace	With	Retrofit Incentive
High Intensity Discharge (HID) Upgrades Based on lamp wattages	I~~i~~ncandescent or tungsten	≤100W Ceramic Metal Halide	$25
	≥400W MH, MV or HPS	≤320W Ceramic Metal Halide	$100
	≥750W MH, MV, or HPS	≤400 W Ceramic Metal Halide	$120
	≥150W and ≤ 250W MH, MV, or HPS, or ≥150W incandescent	≥125W and ≤175W Pulse Start MH	$~~60~~50
	>250W and ≤ 400W MH, MV, or HPS	≥175W and ≤320W Pulse Start MH	$~~75~~60
	> 400W MH, MV, or HPS	≤400W Pulse Start MH	$100
	≥1000W MH, MV or HPS	≤750W Pulse Start MH	$100
	≥ 250 W & < 750 W MH, MV, or HPS	4' - 4, 5, or 6 T8 lamps + EB(s) (High Bay)	$75
	≥750 W MH, MV or HPS	4' - ≥ 8 lamp T8 + EB(s) (High Bay)	$100
Exit Signs	Incandescent or fluorescent exit sign	Light Emitting Diode (LED) or Electro luminescent (EL) exit sign – 1 or 2 faced	$15
	Incandescent or fluorescent exit sign	Photoluminescent or Tritium	$20
Lighting Controls	Wall switch or no control	Wall or Ceiling Mounted Occupancy Sensor (per sensor)	$~~30~~35
	No control	Integral occupancy sensor	$~~25~~30
	No control	Photocell (per sensor) (exterior lights only)	$20
	No control	Time clock (per control)	$20
	No control	Daylighting control	$0.10/ connected Watt
	No control	Bi-level controlled fixtures with integral occupancy sensor (per fixture)	$35
LED Lighting	Indoor incandescent, neon, or fluorescent signage	LED channel letter signage ≤ 2' high	$4/linear foot
		LED channel letter signage > 2' high	$6/linear foot
	Outdoor incandescent, neon, or fluorescent signage	LED channel letter signage ≤ 2' high	$2/linear foot
		LED channel letter signage > 2' high	$3/linear foot
	Fluorescent refrigeration case lighting	LED case lighting	$10/linear foot
	Incandescent, neon or fluorescent signage	LED fixed or scrolling message center signage	See Note 7

Notes for Retrofit lighting incentives:

1. Incentives are capped at ~~50~~ 60 percent of Energy Efficiency Project Costs and subject to the one-year payback cap.
2. 2' U-tube lamps may be substituted for 4' linear fluorescent lamps in the above table.
3. For retrofits of existing equipment, lighting incentives will be paid on a one-for-one equipment replacement basis. If fixture counts are changing, the project may be eligible for a custom Energy Efficiency Incentive.
4. Incentives for T8 Fluorescent Lamp Upgrades may not be combined with other fluorescent fixture incentives and will only be paid once per facility.

5. ~~Eight foot T8s,~~ T8 HO/VHO and High Bay T-8 electronic ballasts are required to have a BF≤ 1.2 to be eligible for incentives. ~~Maximum of two electronic ballasts per fixture.~~

6. To determine the length of LED channel letter signs, measure the length of individual letter at the centerline and add the individual values; do not measure the distance between letters.

7. LED fixed or scrolling message center signage incentives are $0.10 per kilowatt-hour of annual energy savings - see note 1. Savings is subject to Pacific Power approval.

~~7.~~8. Incentives are not available for LED traffic light upgrades ~~will not be paid after December 31, 2006~~.

~~8.~~9. Lighting equipment listed only in the "Replace" column is not eligible for incentives.

~~9.~~10. Incentives are available via an Energy Efficiency Incentive Agreement signed prior to ordering new equipment.

CFL = Compact Fluorescent Lamp

MH = Metal Halide

MV = Mercury Vapor

HPS = High Pressure Sodium

HO = High Output

VHO = Very High Output

LED = Light-emitting diode

New Construction/Major Renovation Lighting Incentive Table

Category	Install	Incentive
Premium T8 Fluorescent Fixture Upgrade [Lamps with initial lumens ≥3100 or wattage ≤30 W; electronic ballasts with BF ≤0.8]	4' - 1 or 2 Premium T8 lamp(s) + EB	$7
	4' - 3 or 4 Premium T8 lamps + EB	$10
T5 Fluorescent Fixture Upgrade	2 T5HO lamps (nominal 4') EB (interior fixtures)	~~$20~~24
	3 T5HO lamps (nominal 4') + EB (High Bay)	~~$40~~48
	~~≥~~4~~-~~7 T5HO lamps (nominal 4') + EB(s) (High Bay)	$60
	≥ 8 T5-HO lamps (nominal 4') + EB(s) (High Bay)	$120
	1 T5 lamp (nominal 4') + EB (interior fixtures)	~~$10~~12
	2 T5 lamps (nominal 4') + EB (interior fixtures)	~~$25~~30
	3 T5 lamps (nominal 4') + EB (interior fixtures)	~~$30~~36
T8 Fluorescent Fixture Upgrade (High Bay)	4' - ≥4 T8 lamps + EB(s) (High Bay)	$45
High Intensity Discharge (HID) Upgrades Based on lamp wattages	≤100W Ceramic Metal Halide	$20
	>100W Ceramic Metal Halide	$40
	~~≥~~>~~125W~~ 500W Pulse Start MH	~~$30~~36
Lighting Controls	Integral occupancy sensor	~~$25~~30
	Daylighting control	$0.10/ connected Watt
	Bi-level controlled fixtures with integral occupancy sensor (per fixture)	$35
LED Lighting	Indoor LED channel letter signage ≤ 2' high	$4/linear foot
	Indoor LED channel letter signage > 2' high	$6/linear foot
	Outdoor LED channel letter signage ≤ 2' high	$2/linear foot
	Outdoor LED channel letter signage > 2' high	$3/linear foot

Notes for new construction and major renovation lighting incentives:

1. The date of the building permit application shall establish the applicable version of the Washington energy code.
2. The total connected interior lighting power for New Construction/Major Renovation projects required to comply with the energy code must be 10 percent lower than the interior lighting power allowance calculated under the applicable version of the Washington energy code. For New Construction/Major Renovation projects not required to comply with the energy code, the total connected lighting power must be 10% lower than common practice as determined by Pacific Power.
3. Incentives are not available for lighting controls required under the applicable version of the Washington energy code. Incentives are not available for daylighting controls and bi-level fixtures if utilized to comply with the applicable version of the Washington energy code.
4. 2' U-tube lamps may be substituted for 4' linear fluorescent lamps in the above table.
5. Electronic ballasts for High Bay T8 fixtures are required to have a ballast factor ≤ 1.2 to be eligible for incentives.
6. To determine the length of LED channel letter signs, measure the length of individual letter at the centerline and add the individual values; do not measure the distance between letters.
7. Incentives are not available for LED traffic light upgrades ~~will not be paid after December 31, 2006~~.

8. Incentives are available via a post-purchase incentive application process. Applying prior to placing equipment orders is recommended but not required.

HO = High Output VHO = Very High Output

LED = Light-emitting diode

Premium Efficiency Motors Incentive Table

Horsepower	Customer Incentive ($/motor)	Nominal Full Load Efficiencies (%)					
		1200 RPMs		1800 RPMs		3600 RPMs	
		Open Drip-Proof (ODP)	Totally Enclosed Fan-Cooled (TEFC)	Open Drip-Proof (ODP)	Totally Enclosed Fan-Cooled (TEFC)	Open Drip-Proof (ODP)	Totally Enclosed Fan-Cooled (TEFC)
1	$45	82.5	82.5	85.5	85.5	77.0	77.0
1.5	$45	86.5	87.5	86.5	86.5	84.0	84.0
2	$54	87.5	88.5	86.5	86.5	85.5	85.5
3	$54	88.5	89.5	89.5	89.5	85.5	86.5
5	$54	89.5	89.5	89.5	89.5	86.5	88.5
7.5	$81	90.2	91.0	91.0	91.7	88.5	89.5
10	$90	91.7	91.0	91.7	91.7	89.5	90.2
15	$104	91.7	91.7	93.0	92.4	90.2	91.0
20	$113	92.4	91.7	93.0	93.0	91.0	91.0
25	$117	93.0	93.0	93.6	93.6	91.7	91.7
30	$135	93.6	93.0	94.1	93.6	91.7	91.7
40	$162	94.1	94.1	94.1	94.1	92.4	92.4
50	$198	94.1	94.1	94.5	94.5	93.0	93.0
60	$234	94.5	94.5	95.0	95.0	93.6	93.6
75	$270	94.5	94.5	95.0	95.4	93.6	93.6
100	$360	95.0	95.0	95.4	95.4	93.6	94.1
125	$540	95.0	95.0	95.4	95.4	94.1	95.0
150	$630	95.4	95.8	95.8	95.8	94.1	95.0
200	$630	95.4	95.8	95.8	96.2	95.0	95.4
250	$687	95.4	95.8	95.8	96.2	95.0	95.8
300	$770	95.4	95.8	95.8	96.2	95.4	95.8
350	$960	95.4	95.8	95.8	96.2	95.4	95.8
400	$1,049	95.8	95.8	95.8	96.2	95.8	95.8
450	$1,139	96.2	95.8	96.2	96.2	95.8	95.8
500	$1,229	96.2	95.8	96.2	96.2	95.8	95.8

Notes for Premium Efficiency Motor incentive table:

1. Motors larger than ~~200~~ 500 horsepower may be eligible for a custom Energy Efficiency Incentive.
2. The NEMA Premium efficiency ratings listed are nominal full-load efficiency ratings. Motors that meet or exceed these efficiency requirements may qualify for an incentive.
3. Incentives are available via a post-purchase incentive application process.

Other Motor Incentives Table

Equipment Type	Size Category	Sub-Category	Minimum Efficiency Requirement	Customer Incentive
Electronically Commutated Motor	≤ 1 horsepower	Refrigeration application	--	$0.50/watt
		HVAC application	--	$50/horsepower
Variable-Frequency Drives (HVAC fans and pumps)	≤ 100 horsepower	HVAC fans and pumps	See Note 3	$65/horsepower
Green Motor Rewinds	≥ 15 and ≤ 500 hp	--	Must meet GMPG Standards	$~~2~~1/horsepower

Notes for other motor incentives table:

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for an incentive.
2. Incentives for all equipment listed in the incentive table are available via a post-purchase application process.
3. Throttling or bypass devices, such as inlet vanes, bypass dampers, three-way valves, or throttling valves must be removed or permanently disabled to qualify for HVAC fan or pump VFD incentives. VFDs required by energy code are not eligible for incentives. Washington energy code requires a VFD on HVAC fans greater than or equal to 10 horsepower. Savings will only be realized for installations where a variable load is present.
4. Except for Green Motor Rewinds, all equipment listed in the table will be eligible for incentives in new construction or retrofit projects.
5. For Green Motor Rewinds, the participating electric motor service center is paid $2/horsepower for eligible Green Motor Rewinds. A minimum of $1/horsepower is paid by the service center to the customer as a credit on the motor rewind invoice. The balance is retained by the service center.
6. For retrofits of existing equipment, incentives are for one-for-one same size equipment replacements.

ECM = Electronically Commutated Motor
VFD = Variable Frequency Drive
GMPG = Green Motors Practices Group

Mechanical and Other Energy Efficiency Measure Incentive Table

Equipment Type	Size Category	Sub-Category	Minimum Efficiency Requirement(s)	ARI Standard	Customer Incentive ($/ton)
Unitary Commercial Air Conditioners, Air Cooled (Cooling Mode)	< 65,000 Btu/hr	Split System and Single Package (single phase)	15.0 SEER 12.5 EER	210/240	$50
	< 65,000 Btu/hr	Split System and Single Package (three phase)	13.0 SEER 11.6 EER	210/240	$50
	≥ 65,000 Btu/hr and < 135,000 Btu/hr	Split System and Single Package	11.0 EER 11.4 IPLV	210/240	$50
	≥ 135,000 Btu/hr and < 240,000 Btu/hr	Split System and Single Package	10.8 EER 11.2 IPLV	340/360	$50
	≥ 240,000 Btu/hr	Split System and Single Package	10.0 EER 10.4 IPLV	340/360	$50
Unitary Commercial Air Conditioners, Water and Evaporatively Cooled	<135,000 Btu/hr	Split System and Single Package	14.0 EER	210/240	$50
	≥135,000 Btu/hr	Split System and Single Package	14.0 EER	340/360	$50
Package Terminal Air Conditioners (PTAC) (Heating & Cooling Mode)	≤ 8,000 Btu/hr	Single Package	11.8 EER 3.3 COP Heating	310/380	$50
	> 8,000 and < 10,500 Btu/hr	Single Package	11.4 EER 3.2 COP Heating		$50
	≥ 10,500 and ≤ 13,500 Btu/hr	Single Package	10.7 EER 3.1 COP Heating		$50
	> 13,500 Btu/hr	Single Package	10.0 EER 3.0 COP Heating		$50
Heat Pumps, Air Cooled (Cooling Mode)	< 65,000 Btu/hr	Split System and Single Package (single phase)	15.0 SEER 12.5 EER	210/240	$50
	< 65,000 Btu/hr	Split System and Single Package (three phase)	13.0 SEER 11.6 EER	210/240	$50
	≥ 65,000 Btu/hr and < 135,000 Btu/hr	Split System and Single Package	11.0 EER 11.4 IPLV	210/240	$50
	≥ 135,000 Btu/hr and < 240,000 Btu/hr	Split System and Single Package	10.8 EER 11.2 IPLV	340/360	$50
	≥ 240,000 Btu/hr	Split System and Single Package	10.0 EER 10.4 IPLV		$50
Heat Pumps, Air Cooled (Heating Mode)	< 65,000 Btu/hr	Split System (single phase)	8.5 HSPF	210/240	See note 3 below
		Single Package (single phase)	8.0 HSPF	210/240	See note 3 below
	< 65,000 Btu/hr	Split System (three phase)	8.0 HSPF	210/240	See note 3 below
		Single Package (three phase)	7.5 HSPF	210/240	See note 3 below
	≥ 65,000 Btu/hr and < 135,000 Btu/hr	47°F. db /43°F. wb Outdoor Air	3.4 COP	340/360	See note 3 below
		17°F. db /15°F. wb Outdoor Air	2.4 COP		See note 3 below
	≥ 135,000 Btu/hr	47°F. db /43°F. wb Outdoor Air	3.3 COP		See note 3 below
		17°F. db /15°F. wb Outdoor Air	2.2 COP		See note 3 below
Heat Pumps, Water Source (Cooling Mode)	< 135,000 Btu/hr	85°F. Entering water	14.0 EER	320	$50
Heat Pumps, Water Source (Heating Mode)	< 135,000 Btu/hr	70°F. Entering water	4.6 COP	320	See note 3 below

HVAC Equipment Incentive Table			Minimum Efficiency Requirement & Customer Incentive		
Equipment Type	**Size Category**	**Sub-Category**	**$50/ton**	**$75/ton**	**$100/ton**
Unitary Commercial Air Conditioners, Air-Cooled (Cooling Mode)	< 65, 000 Btu/hr	Split system and single package (single phase)	15.0 SEER and 12.5 EER	--	--
	< 65, 000 Btu/hr See Note 8	Split system and single package (three phase)	13.0 SEER and 11.6 EER	14.0 SEER and 11.6 EER	15.0 SEER and 12.0 EER
	≥ 65,000 Btu/hr and < 135,000 Btu/hr See Note 8	Split system and single package	11.0 EER and 11.4 IPLV	11.5 EER and 11.9 IPLV	12.0 EER and 12.4 IPLV
	≥ 135,000 Btu/hr and < 240,000 Btu/hr See Note 8	Split system and single package	10.8 EER and 11.2 IPLV	11.5 EER and 11.9 IPLV	12.0 EER and 12.4 IPLV
	≥ 240,000 Btu/hr and < 760,000 Btu/hr See Note 8	Split system and single package	10.0 EER and 10.4 IPLV	10.5 EER and 10.9 IPLV	10.8 EER and 12.0 IPLV
	≥ 760,000 Btu/hr See Note 8	Split system and single package	9.7 EER and 10.1 IPLV	9.7 EER and 11.0 IPLV	10.2 EER and 11.0 IPLV
Unitary Commercial Air Conditioners, Water and Evaporatively Cooled	< 135,000 Btu/hr	Split system and single package	14.0 EER	--	--
	≥ 135,000 Btu/hr	Split system and single package	14.0 EER	--	--
Package Terminal Air Conditioners and Heat Pumps (PTAC/PTHP) (Heating & Cooling Mode)	≤ 8,000 Btu/hr	Single package	11.8 EER and 3.3 COP Heating	--	--
	> 8,000 Btu/hr and < 10,500 Btu/hr	Single package	11.4 EER and 3.2 COP Heating	--	--
	≥ 10,500 Btu/hr and ≤ 13,500 Btu/hr	Single package	10.7 EER and 3.1 COP Heating	--	--
	> 13,500 Btu/hr	Single package	10.0 EER and 3.0 COP Heating	--	--
Heat Pumps, Air-Cooled (Cooling Mode)	< 65, 000 Btu/hr	Split system and single package (single phase)	15.0 SEER and 12.5 EER	--	--
	< 65, 000 Btu/hr See Note 8	Split system and single package (three phase)	13.0 SEER and 11.6 EER	14.0 SEER and 11.6 EER	15.0 SEER and 12.0 EER
	≥ 65,000 Btu/hr and < 135,000 Btu/hr See Note 8	Split system and single package	11.0 EER and 11.4 IPLV	11.5 EER and 11.9 IPLV	12.0 EER and 12.4 IPLV
	≥ 135,000 Btu/hr and < 240,000 Btu/hr See Note 8	Split system and single package	10.8 EER and 11.2 IPLV	11.5 EER and 11.9 IPLV	12.0 EER and 12.4 IPLV
	≥ 240,000 Btu/hr See Note 8	Split system and single package	10.0 EER and 10.4 IPLV	10.5 EER and 10.9 IPLV	10.8 EER and 12.0 IPLV
Heat Pumps, Air-Cooled (Heating Mode) - See Note 3	< 65, 000 Btu/hr	Split system (single phase)	8.5 HSPF	--	--
		Single package (single phase)	8.0 HSPF	--	--
	< 65, 000 Btu/hr See Note 8	Split system (three phase)	8.0 HSPF	8.5 HSPF	9.0 HSPF
		Single package (three phase)	7.5 HSPF	8.0 HSPF	8.5 HSPF
	≥ 65,000 Btu/hr and < 135,000 Btu/hr See Note 8	47°F db/43°F wb outdoor air	3.4 COP	3.4 COP	3.4 COP
		17°F db/15°F wb outdoor air	2.4 COP	2.4 COP	2.4 COP
	≥ 135,000 Btu/hr See Note 8	47°F db/43°F wb outdoor air	3.2 COP	3.2 COP	3.2 COP
		17°F db/15°F wb outdoor air	2.1 COP	2.1 COP	2.1 COP

HVAC Equipment Incentive Table (cont.)

Equipment Type	Size Category	Sub-Category	Minimum Efficiency Requirement & Customer Incentive		
			$50/ton	$75/ton	$100/ton
Heat Pumps, Water-Source (Cooling Mode)	< 135,000 Btu/hr	86°F Entering Water	14.0 EER	--	--
Heat Pumps, Water-Source (Heating Mode) - See Note 3	< 135,000 Btu/hr	68°F Entering Water	4.6 COP	--	--
Heat Pumps, Ground-Source (Cooling Mode)	< 135,000 Btu/hr	77°F Entering Water	14.1 EER	--	--
Heat Pumps, Ground-Source (Heating Mode) - See Note 3	< 135,000 Btu/hr	32°F Entering Water	3.3 COP	--	--
Heat Pumps, Groundwater-Source (Cooling Mode)	< 135,000 Btu/hr	59°F Entering Water	16.2 EER	--	--
Heat Pumps, Groundwater-Source (Heating Mode) - See Note 3	< 135,000 Btu/hr	50°F Entering Water	3.6 COP	--	--

Equipment Type	Size Category	Sub-Category	Incentive
Ground-Source or Groundwater-Source Heat Pump Loop	All sizes	Open Loop	$25/ton
		Closed Loop	

Notes for HVAC equipment incentive table

1. For retrofits of existing equipment, incentives are for one-for-one same size equipment replacements. Exception: PTHPs can replace electric resistive heating, which must be removed.
2. Equipment that meets or exceeds the efficiency requirements listed for the size category in the above table may qualify for an incentive. Equipment must meet both listed efficiency requirements to qualify for incentives.
3. Incentives for heat pumps are $50-100 per ton of cooling capacity ONLY. No incentives are paid per ton of heating capacity. Heat Pumps must meet both the cooling mode and heating mode efficiency requirements to qualify for per ton cooling efficiency incentives.
4. Incentives for all equipment listed in the incentive table are available via a post-purchase application process.
5. Except where noted, all equipment listed in the table will be eligible for incentives in both new construction and retrofit projects.
6. Equipment size categories are specified in terms of net cooling capacity at AHRI standard conditions as determined by AHRI Standard 210/240 for units <<65,000 Btu/hr, AHRI Standard 340/360 for units >>65,000 Btu/hr, and AHRI Standard 310/380 for PTAC and PTHP units.
7. Ground and Water Source Heat Pumps must meet or exceed listed efficiency requirements when rated in accordance with ISO-13256-1 to qualify for an incentive
8. **For HVAC equipment in size categories that indicate "See Note 8", $50/ton incentives will not be available for equipment purchased after December 31 2009.**

SEER = Seasonal Energy Efficiency Ratio
EER = Energy Efficiency Ratio

COP = Coefficient of Performance
HSPF = Heating Seasonal Performance Factor
~~IDEC = Indirect Direct Evaporative Cooling~~
IPLV = Integrated Part Load Value
PTHP = Package Terminal Heat Pump
PTAC = Package Terminal Air Conditioner
HVAC = Heating, Ventilation and Air Conditioning

Mechanical and Other Energy Efficiency Measure Incentive Table – Continued

Equipment Type	Size Category	Sub-Category	Minimum Efficiency Requirement(s)	Customer Incentive
Evaporative Cooling	All	Direct or Indirect	Industry Standard Rating (ISR) CFM	$0.02/ISR CFM
Programmable Thermostats	All sizes with non-programmable thermostat for air conditioner All sizes with non-programmable thermostat for heat pumps or all electric heating	Programmable thermostat for air conditioner Optimizer programmable thermostat for heat pumps or all electric heating	Must comply with 2006 Energy Star ® Requirements Must comply with 2006 Energy Star ® requirements	$50/thermostat $70/thermostat
Chillers	All except chillers intended for backup service only	Serving primarily occupant comfort cooling loads (no more than 20% for process cooling loads)	Must exceed minimum efficiencies required by energy code	$0.12/kWh annual energy savings + $50/kW See note 4
Variable Frequency Drive (VFD) – HVAC fans and pumps	≤ 100 horsepower HVAC fans and pumps	HVAC fans and pumps	See Note 5	$65/horsepower
Occupancy Based PTHP/PTAC control	All sizes with no prior occupancy based control		See Note 6	$50/controller
Electronically Commutated Motor (ECM)	≤ 1 horsepower	Refrigeration application HVAC application		$0.50/Watt $50/horsepower
Solid Door Refrigerator	≤ 30 cubic feet volume (V) 31 – 60 cubic feet ≥ 61 cubic feet		Maximum kWh/day = 0.06*V+1.22	$50/unit $70/unit $90/unit
Solid Door Freezer	≤ 30 cubic feet volume 31 – 60 cubic feet ≥ 61 cubic feet		Maximum kWh/day = 0.28*V+0.97	$150/unit $175/unit $200/unit
Cool Roof	Roofing over spaces with mechanical cooling		Must comply with Energy Star ® Reflective Roof Products requirements	$0.10/square foot
Plug Load Occupancy Sensor				$15/qualifying unit
Beverage or refrigerated display machine occupancy sensor	No occupancy sensor control	Beverage vending or refrigerated display machine occupancy sensor	See Note 7	$75/sensor

Notes for Mechanical and Other Energy Efficiency Measures incentive table:

1. For retrofits of existing equipment, incentives are for one-for-one same size equipment replacements. Exception: PTACs can replace electric resistive heating, which must be removed.
2. Equipment that meets or exceeds the efficiency requirements listed for the size category in the above table may qualify for an incentive.
3. Incentives for heat pumps are $50 per ton of cooling capacity ONLY. No incentives are paid per ton of heating capacity. Heat Pumps must meet both the cooling mode and heating mode efficiency requirements to qualify for per ton cooling efficiency incentives.
4. Chiller energy and demand savings subject to approval by Pacific Power. Owner/Customer must receive pre-approval for chiller incentives prior to ordering new equipment.
5. Throttling or bypass devices, such as inlet vanes, bypass dampers, three-way valves, or throttling valves must be removed or permanently disabled to qualify for HVAC fan and pump VFD incentives. VFDs required by energy code are not eligible for incentives. Savings will only be realized for installations where a variable load is present.
6. Controller units must include an occupancy sensor and include the capability to setback the zone temperature during extended unoccupied periods and setup the temperature once the zone is occupied.

~~7. Intended for refrigerated vending machines and display cases containing only non-perishable bottled and canned beverages. Refurbished equipment that includes occupancy control is eligible.~~
~~8. Incentives for all equipment listed except chillers is available via a post-purchase application process.~~
~~9. **SEER** = Seasonal Energy Efficiency Ratio **EER** = Energy Efficiency Ratio~~
~~**COP** = Coefficient of Performance~~
~~**HSPF** = Heating Seasonal Performance Factor **IPLV** = Integrated Part Load Value~~
~~**PTHP** = Package Terminal Heat Pump **PTAC** = Package Terminal Air Conditioner~~
~~**HVAC** = Heating, Ventilating, and Air Conditioning **ECM** = Electronically Commutated Motor~~

Other HVAC Equipment and Controls Incentives

Equipment Type	Size Category	Sub-Category	Minimum Efficiency Requirement	Customer Incentive
Evaporative Cooling	All sizes	Direct or Indirect	Industry Standard Rating (ISR)	$0.02/ISR CFM
Indirect-Direct Evaporative Cooling (IDEC)	All sizes	--	Applicable system components must exceed minimum efficiencies required by energy code	~~$0.12/kWh annual energy savings + $50/kW~~ (See Note 4)
Chillers	All except chillers intended for backup service only	Serving primarily occupant comfort cooling loads (no more than 20% of process cooling loads)	Must exceed minimum efficiencies required by energy code	~~$0.12/kWh annual energy savings + $50/kW~~ (See Note 5)
365/366 day Programmable Thermostat	All sizes in portable classrooms with mechanical cooling	Must be installed in portable classroom unoccupied during summer months	365/366 day thermostatic setback capability	$150/thermostat
Occupancy Based PTHP/PTAC control	All sizes with no prior occupancy based control	--	See Note ~~7~~6	$50/controller

Notes for other HVAC equipment and controls incentive table
1. For retrofits of existing equipment, incentives are for one-for-one same size equipment replacements.
2. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for an incentive.
3. Incentives for all equipment listed in the incentive table are available via a post-purchase application process.
4. Incentives are paid at $0.12/kWh + $50/kW. IDEC energy and demand savings subject to approval by Pacific Power.
5. Incentives are paid at $0.12/kWh + $50/kW. Chiller energy and demand savings subject to approval by Pacific Power.
6. Controller units must include an occupancy sensor and include the capability to set back the zone temperature during extended unoccupied periods and set up the temperature once the zone is occupied.

CFM = Cubic Feet per Minute
ISR = Industry Standard Rating
IDEC = Indirect Direct Evaporative Cooling
PTHP = Package Terminal Heat Pump
PTAC = Package Terminal Air Conditioner

Building Envelope (Retrofit) Incentives

Equipment Type	Category	Minimum Efficiency Requirement	Customer Incentive
Cool Roof	--	ENERGY STAR Qualified	$0.10/square foot
Roof/Attic Insulation	--	Minimum increment of R-10 insulation	$0.08/square foot
Wall Insulation	--	Minimum increment of R-10 insulation	$0.10/square foot
Windows (See Note 4)	Site-Built	U-Factor ≤ 0.30 and SHGC ≤ 0.33 (Glazing Only Rating)	$0.34/square foot
	Assembly	U-Factor ≤ 0.35 and SHGC ≤ 0.33 (Entire Window Assembly Rating)	$0.34/square foot
Window Film	Existing Windows	See Note 6	See Note 6

Notes for retrofit building envelope incentive table

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for an incentive.
2. Incentives for all equipment listed in the incentive table are available via a post-purchase application process for retrofit projects only.
3. Building must be conditioned with mechanical cooling to be eligible for envelope incentives.
4. Energy performance of window assemblies and glazing products must be rated in accordance with NFRC. Site-Built metal window systems must include a thermal break within the frame or other appropriate NFRC certification to qualify for incentives. Skylights are not eligible to receive incentives.
5. Window square footage is determined by the dimensions of the entire window assembly, not just the window glass.
6. Incentives for window film are calculated based on film specifications and window orientation at $0.12/kWh annual energy savings. Energy savings subject to approval by Pacific Power.

NFRC = National Fenestration Rating Council

Building Envelope (New Construction/Major Renovation) Incentives

Equipment Type	Category	Minimum Efficiency Requirement	Customer Incentive
Cool Roof	--	ENERGY STAR Qualified	$0.10/square foot
Roof/Attic Insulation	--	Minimum increment of R-5 insulation above code (See Note 6)	$0.04/square foot
Wall Insulation	--	Minimum increment of R-3.7 continuous insulation above code (See Note 6)	$0.05/square foot
Windows (See Note 5)	Site-Built	U-Factor ≤ 0.30 and SHGC ≤ 0.33 (Glazing Only Rating)	$0.34/square foot
	Assembly	U-Factor ≤ 0.35 and SHGC ≤ 0.33 (Entire Window Assembly Rating)	$0.34/square foot

Notes for building envelope (new construction/major renovation) incentives table

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for an incentive.
2. Incentives for all equipment listed in the incentive table are available via a post-purchase application process for new construction projects only.
3. Building must be conditioned with mechanical cooling to be eligible for envelope incentives.
4. Window square footage is determined by the dimensions of the entire window assembly, not just the window glass.
5. Energy performance of window assemblies and glazing products must be rated in accordance with NFRC. Energy performance of window assemblies and glazing products must be rated in accordance with NFRC. Site-Built metal window systems must include a thermal break within the frame or other appropriate NFRC certification to qualify for incentives. Skylights are not eligible to receive incentives.
6. Compliance with the minimum efficiency requirements of Roof/Attic Insulation and Wall Insulation measures may be demonstrated with equivalent U-factors and is subject to Pacific Power approval.

NFRC = National Fenestration Rating Council

Food Service Equipment Incentives

Equipment Type	Equipment Category	Minimum Efficiency Requirement	Customer Incentive
Residential Dishwasher (Electric Water Heating Only) (See Note 3)	Used in a Commercial Facility	ENERGY STAR Qualified	$20
Commercial Dishwasher (Electric Water Heating Only) (See Note 3)	Undercounter	ENERGY STAR Qualified	$500
	Stationary Rack, Single Tank, Door Type	ENERGY STAR Qualified	$1,000
	Single Tank Conveyor	ENERGY STAR Qualified	$1,500
	Multiple Tank Conveyor	ENERGY STAR Qualified	$2,000
Electric Insulated Holding Cabinet	Full Size	ENERGY STAR Qualified	$300
	3/4 Size		$250
	1/2 Size		$200
Electric Steam Cooker	3-, 4-, 5- and 6-pan sizes	ENERGY STAR Qualified	$750
Electric Convection Oven	--	≥~~>~~70% cooking efficiency (tested in accordance with ASTM F1496)	$350
Electric Griddle	--	≥~~>~~70% cooking efficiency (tested in accordance with ASTM F1275)	$300
Electric Combination Oven	--	≥~~>~~60% cooking efficiency (tested in accordance with ASTM F1639)	$1,000
Electric Commercial Fryer	--	ENERGY STAR Qualified	$200
Ice Machines (Air-Cooled Only)	All types, ≤500 lbs/day	ENERGY STAR Qualified	$125
		CEE Tier 3 Qualified	$150
	All types, >500 lbs/day	ENERGY STAR Qualified	$250
		CEE Tier 3 Qualified	$400
Residential Refrigerator	Used in a Commercial Facility	ENERGY STAR Qualified	$20
Commercial Glass Door Refrigerator	≤ 30 cubic feet volume (V)~~1 Door~~	CEE Tier 2 Qualified	$125
	31-60 cubic feet~~2 Door~~		$150
	≥ 61 cubic feet~~3 Door~~		$175
Solid Door Refrigerator	≤ 30 cubic feet volume (V)	CEE Tier 2 Qualified	$50
	31-60 cubic feet		$70
	≥ 61 cubic feet		$90
Solid Door Freezer	≤ 30 cubic feet volume (V)	CEE Tier 2 Qualified	$150
	31-60 cubic feet		$175
	≥ 61 cubic feet		$200

Notes for food service equipment incentives table

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for an incentive.
2. Incentives for all equipment listed in the incentive table are available via a post-purchase application process.
3. Dishwashers must be supplied with electrically heated domestic hot water. Models with either electric or gas booster heaters are eligible for incentives.

CEE = Consortium for Energy Efficiency
ASTM = American Society for Testing and Materials

Appliances Incentive Table

Equipment Type	Equipment Category	Minimum Efficiency Requirement	Customer Incentive
Ceiling Fans	Residential (used in a business)	ENERGY STAR Qualified	$20
High-Efficiency Clothes Washer (must have electric water heating)	Residential (~~U~~used in a ~~B~~business)	ENERGY STAR Qualified	$50
		CEE Tier 2	$100
	Commercial (Coin-operated/Laundromat)	ENERGY STAR Qualified	$150
		CEE Tier 2	$200
Room Air Conditioners	Residential (used in a business)	ENERGY STAR Qualified	$30
Electric Water Heater	Residential (40 gallon or larger)	EF ≥ 0.93	$50

Notes for appliances incentive table

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for an incentive.
2. Incentives for all equipment listed in the incentive table are available via a post-purchase application process.

EF = Energy Factor
MEF = Modified Energy Factor
WF = Water Factor
CEE = Consortium for Energy Efficiency

Irrigation Incentive Table (Retrofit Only)

Irrigation Measure	Replace	With	Limitations	Customer Incentive
Repair Leaking Wheel Lines, Hand Lines and Portable Mainlines	Worn and leaking pipe connections	Cut and pipe press or weld repair of leaking pipe connections	1. Invoice must show number of joints repaired	$8.00/joint
Rotating type, Spray Heads or Low-Pressure Pivot Sprinkler Heads	Worn rotating, impact, or spray-type sprinklers	New rotating type, spray heads, or low-pressure pivot sprinkler heads	1. Must be same design flow or less 2. Limited to 2 replacements per irrigated acre	$3.00~~/~~ each (up to 60% of measure costs)
Center Pivot Base Boot Gasket	Worn and leaking center pivot base boot gasket	New center pivot base boot gasket	--	$80~~/~~ each
Drains and Gaskets for Wheel Lines, Hand Lines, Pivots or Portable Main Lines	Worn and leaking drains and gaskets	New drains and gaskets (See Note 4)	1. Limited to 2 replacements per irrigated acre	$1.00~~/~~ each
Flow-Controlling Type Nozzles	Existing brass or worn flow-controlling type nozzles	New flow-controlling type nozzles	1. Must be same design flow or less 2. Limited to 2 replacements per irrigated acre	$1.50~~/~~ each
Sprinkler Nozzles	Existing worn nozzle	New brass or plastic range nozzle	1. Must be same design flow or less 2. Limited to 2 replacements per irrigated acre	$0.25~~/~~ each
Gooseneck Elbow with Drop Tube or Boomback	Worn or leaking gooseneck elbow with drop tube or boomback	New gooseneck elbow with drop tube or boomback	--	$1.00/outlet
Wheel-line Hubs (on Thunderbird Wheel Lines)	Worn or leaking hub	New wheel-line hub	--	$12.00~~/~~ each
Sprinkler Pressure Regulators	Worn or faulty regulator	New Pressure regulator	1. Must be same design pressure or less 2. Limited to 2 replacements per irrigated acre	$2.75~~/~~ each ~~(up to 60% of measure costs)~~
Brass-Impact Sprinklers	Worn or leaking brass-impact sprinkler	New or rebuilt brass impact sprinkler	1. Limited to 2 replacements per irrigated acre	$3.00~~/~~ each (up to 60% of measure costs)
Wheel-line Leveler	Worn or faulty wheel-line leveler	New or rebuilt wheel-line leveler	--	$0.75~~/~~ each
Wheel-line Feed Hose	Worn or leaking wheel-line feed hose	New or rebuilt wheel-line feedhose	--	$15.00~~/~~ each

Notes for irrigation incentive table

1. Irrigation measures that meet the replacement requirements listed in the above table may qualify for an incentive.
2. Incentives for all equipment listed in the incentive table are available via a post-purchase application process.
3. All equipment listed in the table will be eligible for incentives only in replacement or retrofit projects.
4. Also includes seals and riser caps (dome discs) for valve openers.
5. For Energy Efficiency Measures where the incentive is limited to 60% of Energy Efficiency Measure costs, Energy Efficiency Measure costs are subject to Pacific Power approval.

Dairy/Farm Equipment Incentives Table

Equipment Type	Equipment Category	Minimum Efficiency Requirements	Customer Incentive
Automatic Milker Takeoffs (Retrofit Only)	--	Equipment must be able to sense milk flow and remove milker when flow reaches a pre-set level.	$235 each
Tractor Block Heater Timers	--	Timer must be a UL-listed device and rated for a minimum of 15 amps continuous duty.	$10 each
Circulating Fans (See Note 3)	12-23" Diameter	Fans must achieve an efficiency level of 11 cfm/W	$25/fan
	24-35" Diameter	Fans must achieve an efficiency level of 18 cfm/W	$35/fan
	36-47"" Diameter	Fans must achieve an efficiency level of 18 cfm/W	$50/fan
	≥48" Diameter	Fans must achieve an efficiency level of 25 cfm/W	$75/fan
Heat Reclaimers	--	Heat reclaimer must use waste heat from compressor to heat water. Customer must use electricity to heat water.	$220/condenser kW
High-efficiency Ventilation Systems (See Note 3)	12-23" Diameter	Fans must achieve an efficiency level of 11 cfm/W	$45/fan
	24-35" Diameter	Fans must achieve an efficiency level of 13 cfm/W	$75/fan
	36-47"" Diameter	Fans must achieve an efficiency level of 17 cfm/W	$125/fan
	≥48" Diameter	Fans must achieve an efficiency level of 19.5 cfm/W	$150/fan
Milk Pre-coolers	--	The equipment must cool milk with well-water before it reaches the bulk cooling tank.	See Note 4
Programmable Ventilation Controller	--	The equipment must control ventilation fans based on temperature or environmental settings.	$20/fan controlled
Variable Frequency Drives for Dairy Vacuum Pumps (Retrofit Only)	--	The equipment must vary the motor speed in accordance with the air flow needs of the vacuum system. Incentive available for retrofit only.	$165/hp

Notes for dairy/farm equipment incentives table

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for an incentive.
2. Incentives for all equipment listed in the incentive table are available via a post-purchase application process.
3. Fan performance must by rated by an independent testing body in accordance with the appropriate ANSI/AMCA standards.
4. Incentives are paid at $0.12/kWh + $50/kW. Milk Pre-Cooler energy and demand savings subject to approval by Pacific Power.
5. Except where noted, all equipment listed in the table will be eligible for incentives in both new construction and retrofit projects.

AMCA = Air Movement & Control Association International, Inc.
ANSI = American National Standards Institute

Compressed Air Incentive Table (Size ≤ 75 Horsepower)

Equipment Category	Replace	With	Limitations	Customer Incentive
Low-Pressure Drop Filters	Standard Coalescing Filter	Rated Low-Pressure Drop Filter where: 1. Pressure Loss at Rated Flow is ≤ 1psi, ≤ 3psi at element change 2. Particulate Filtration is 100% at ≥ 3.0 microns, 99.98% at 0.1 to 3.0 microns, ≤ 5 ppm liquid carryover 3. Filter is of deep-bed "mist eliminator"	1. Compressor must be ≥ 25 HP	$0.80/scfm
Receiver Capacity Addition	Limited or no Receiver Capacity (≤ 2 gallons per scfm of compressor capacity)	Receiver capacity > 2 gallons per scfm of compressor capacity	1. Compressor must use load/unload controls without inlet modulation or on/off control. 2. Systems with a VFD or using variable displacement control are not eligible.	$1.50/gallon above 2 gallons per scfm
Refrigerated Cycling Dryers	Non-Cycling Refrigerated Dryer	Cycling Refrigerated Dryer	1. Rated dryer capacity must be ≤ 500 scfm 2. Dryer must operate exclusively in cycling mode and cannot be equipped with the ability to select between cycling and non-cycling mode 3. Refrigeration compressor must cycle off during periods of reduced dem	$1.50/scfm
VFD Controlled Compressor	Compressor 75 hp or Smaller	VFD-Controlled Oil-Injected Screw Compressor	1. Compressor must adjust speed as primary means of capacity control 2. Compressor must not use inlet modulation when demand is below minimum speed air production	$0.15/kWh See Note 4
Zero Loss Condensate Drains	Fixed Timer Drain	Zero Loss Condensate Drain (See Note 5)	Drain is designed to function without release of compressed air into the atmosphere	$90/ each
Outside Air Intake	Compressor intake drawing air from compressor room	Permanent ductwork between compressor air intake and outdoors	Ductwork must meet manufacturer's specifications, which may include: (a) ≤ 0.25" W.C. pressure loss at rated flow, and (b) allow use of compressor room air during extremely cold conditions	$6.00/hp

Notes for compressed air incentive table

1. Eligibility for incentives is limited to customers with compressed air system(s) containing a single operating compressor less than or equal to 75 hp in size. Multiple compressor systems and compressors larger than 75hp will not be eligible for incentives listed above.
2. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for an incentive.
3. Incentives for all equipment listed in the incentive table are available via a post-purchase application process.
4. Incentives for VFD-controlled compressors are calculated based on compressor size and other system parameters at $0.15/kWh annual energy savings. Energy savings subject to approval by Pacific Power.
5. Zero Loss Condensate Drains purchased as requirements for other compressed air measures are eligible for incentives.

SCFM = Cubic Feet of air per Minute at standard conditions (14.5 psia, 68°F, and 0% relative humidity)

Incentives for Other Energy Efficiency Measures

Equipment Type	Replace	Minimum Efficiency Requirements	Customer Incentive
Network PC Power Management Software	--	1. Installed software must automatically control the power settings of networked personal computers (PC) at the server level 2. The software must manage power consumption for each individual PC 3. The software must include the capability to report energy	$7 per controlled PC (up to 100% of measure costs)
Smart Plug Strip	--	Incentive applies to any plug strip that eliminates idle or stand-by power consumption of connected plug-load appliance through the use of an occupancy sensor, electric load sensor, or timer.	$15/qualifying unit
Beverage or refrigerated display machine occupancy sensor	No occupancy sensor control	See Note 4	$75/sensor

Notes for other energy efficiency measures incentives table

1. Equipment that meets or exceeds the efficiency requirements listed for the equipment category in the above table may qualify for an incentive.
2. Incentives for all equipment listed in the incentive table are available via a post-purchase application process.
3. All equipment listed in the table will be eligible for incentives in new construction or retrofit projects.
4. Intended for refrigerated vending machines and display cases containing only non-perishable bottled and canned beverages. Refurbished equipment that includes occupancy control is eligible.
5. Energy Efficiency Measure Costs for Network PC Power Management Software are subject to Pacific Power approval.

ATTACHMENT E

THE CADMUS GROUP, INC.

quantec

Date: **May 7, 2009**

To: **Nancy Goddard**

From: **Brian Hedman**

Re: **Washington FinAnswer Express Program Cost Effectiveness**

The tables below present the cost effectiveness findings of the Washington FinAnswer Express program based on estimated year 1 costs and savings provided by PacifiCorp in a spreadsheet entitled "WA EF and FE proposed program CE inputs for Brian 4-29-2009". The Utility discount rate is from the 2007 PacifiCorp Integrated Resource Plan.

Cost effectiveness was tested using the 2007 IRP 67% west side system load factor decrement. Table 1 lists modeling inputs.

The program is cost effective from all perspectives.

Table 1: FinAnswer Express
Inputs

Parameter	Value
Discount Rate	7.1%
Commercial Line Loss	10.834%
Industrial Line Loss	9.137%
2008 Average Commercial Energy Rate ($/kWh)	$0.0603
2008 Average Industrial Energy Rate ($/kWh)	$0.0506
Measure Life	13

Table 2: FinAnswer Express
Annual Program Costs and Savings

Year	Program Costs	Evaluation	Incentives	Total Utility Costs	Net Customer Costs	Net kWh Savings
2009	$497,145	$50,000	$570,288	$1,117,433	$1,853,784	5,032,663

Table 3: IRP 67% Load Factor Decrement

All Measures				AC: IRP 67% LF Decrement	
	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	0.0536	$2,241,764	$2,682,089	$440,325	1.196
Total Resource Cost Test (TRC) No Adder	0.0536	$2,241,764	$2,438,262	$196,498	1.088
Utility Cost Test (UCT)	0.0249	$1,043,355	$2,438,262	$1,394,908	2.337
Rate Impact Test (RIM)		$3,954,082	$2,438,262	($1,515,820)	0.617
Participant Cost Test (PCT)		$1,198,409	$3,397,207	$2,198,798	2.835
Lifecycle Revenue Impacts ($/kWh)				$0.0000246081	

Table 4 presents the first year costs and savings by measure type for the proposed FinAnswer Express program. These estimates are based on the year 1 market characterization report added to the actual program experience from 2008.

Table 4: Year 1 Costs and Savings by Measure

Measure	Administrative Costs	Incentives	Total Utility Cost	Net Customer Incremental Cost	Net Annual Energy Savings
Appliances	$819	$3,637	$4,456	$4,815	10,924
Compressed Air	$14,521	$36,766	$51,287	$156,480	193,618
Envelope	$1,038	$2,411	$3,449	$3,052	13,834
Farm Equipment	$5,608	$8,687	$14,295	$13,316	74,778
Food Service	$7,469	$10,448	$17,917	$62,251	99,592
HVAC	$2,693	$11,557	$14,250	$42,457	40,510
Irrigation	$11,012	$12,988	$24,000	$32,477	146,824
Lighting	$12,021	$465,567	$477,588	$1,512,178	4,306,699
Motors	$9,097	$16,591	$25,688	$23,292	109,261
Office Equipment	$2,746	$1,635	$4,381	$3,466	36,620
Other Admin	$480,120		$480,120		
Total First Year	$547,144	$570,287	$1,117,431	$1,853,784	5,032,661

ATTACHMENT F

THE CADMUS GROUP, INC.

quantec

Date: May 7, 2009

To: Nancy Goddard

From: Brian Hedman

Re: Washington Energy FinAnswer Proposed Program Cost Effectiveness

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The tables below present the cost effectiveness findings of the Washington Energy FinAnswer program based on estimated year 1 costs and savings provided by PacifiCorp in a spreadsheet entitled "WA EF and FE proposed program CE inputs for Brian 4-29-2009". The Utility discount rate is from the 2007 PacifiCorp Integrated Resource Plan.

Cost effectiveness was tested using the 2007 IRP 67% west side system load factor decrement. Table 1 lists modeling inputs.

The program is cost effective from all perspectives except for the rate impact test which indicates the program will have an upward pressure on rates.

Table 1: Energy FinAnswer – Inputs

Parameter	Value
Discount Rate	7.1%
Commercial Line Loss	10.834%
Industrial Line Loss	9.137%
2008 Commercial Energy Rate ($/kWh)	$0.0603
2008 Industrial Energy Rate ($/kWh)	$0.0506
Measure Life	15

Table 2: Energy FinAnswer

Year	Program Costs	Evaluation	Incentives	Total Utility Costs	Net Customer Costs	Net kWh Savings
2009	$896,476	$159,000	$2,270,007	$3,325,483	$3,823,620	16,082,879

Table 3: Energy FinAnswer

All Measures				AC: IRP 67% LF Decrement	
	Levelized $/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	0.0313	$4,555,645	$9,420,826	$4,865,181	2.068
Total Resource Cost Test (TRC) No Adder	0.0313	$4,555,645	$8,564,388	$4,008,742	1.880
Utility Cost Test (UCT)	0.0213	$3,105,026	$8,564,388	$5,459,362	2.758
Rate Impact Test (RIM)		$12,358,592	$8,564,388	($3,794,204)	0.693
Participant Cost Test (PCT)		$1,450,619	$11,566,957	$10,116,338	7.974
Lifecycle Revenue Impacts ($/kWh)				$0.0000615959	