



# 2010-2011 Biennial Conservation Report Washington

Revised August 21, 2012

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## Introduction

PacifiCorp's, d.b.a. Pacific Power & Light Company ("PacifiCorp" or the "Company") 2010-2011 Biennial Conservation Report is being submitted to the Washington Department of Commerce ("Commerce") and Washington Utilities and Transportation Commission ("Commission") in response to reporting requirements established as part of the Energy Independence Act. The report is consistent with chapter 19.285 RCW, section 70 which states:

*(1) On or before June 1, 2012, and annually thereafter, each qualifying utility shall report to the department on its progress in the preceding year in meeting the targets established in RCS 19.285.40, including expected electricity savings from the biennial conservation target, expenditures on conservation, actual electricity savings results, the utility's annual load for the prior two years, the amount of megawatt-hours needed to meet the annual renewable energy target, the amount of megawatt-hours of each type of eligible renewable resource acquired, the type and amount of renewable energy credits acquired, and the percent of its total annual retail revenue requirement invested in the incremental cost of eligible renewable resources and the cost of renewable energy credits."*

This report is also consistent with the guidelines set forth in WAC 480-109-040(1) and Condition (8)(h) in Docket UE-100170, Order 02, addressing annual reporting requirements.

As directed in Docket UE-100523 memorandum dated May 4, 2012, two separate filings will be submitted for "Conservation" and "Renewables". This report is addressing the Conservation target and savings.

Consistent with the requirement to pursue all cost-effective, reliable and feasible conservation, the Company completed a comprehensive conservation potential assessment followed by economic resource screening and selection through the Company's Integrated Resource Planning process. The resulting ten-year conservation forecast and biennial target was filed with and approved by the Commission in Docket UE-100170.

## Executive Summary

The Company has achieved its 2010-2011 Biennial Conservation Target as set forth in Docket UE-100170, PacifiCorp's Ten-Year Conservation Potential and 2010-2011 Biennial Conservation Target.

A summary of 2010-2011 electric conservation targets, expenditures and savings results are provided below.

	<b>SAVINGS (aMW)</b>	<b>SAVINGS (MWH)</b>	<b>EXPENDITURES</b>
<b>Achieved</b>	10.6	92,670	\$16,816,419
<b>Target</b>	8.5	74,460	\$16,156,997
<b>Percent of Target</b>	125%	124%	104%

Consistent with the conditions established by the Commission in Docket UE-100170 Order 02, the cost-effectiveness has been determined based on the Total Resource Cost (TRC) test incorporating the 10 percent conservation benefit and risk adder consistent with the Northwest Power and Conservation Council's approach. Using this test, the benefit to cost ratio for the Company's 2010-2011 Biennial Conservation savings was 2.94.

Working in partnership with its customers, Commission staff, and demand side management advisory group members the Company achieved these results while adhering to the conditions established by the Commission in Docket UE-100170. Appendix 2 summarizes the Company's compliance.

# Energy Independence Act (I-937) Commerce Conservation Report

Utility	<b>PacifiCorp (dba Pacific Power)</b>	
Report Submittal Date	August 21, 2012	Revised
Utility Contact Name/Dept	<b>Carla Bird</b>	
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	<b>2010-2011 Biennial</b>	<b>2012-2013 Biennial</b>
Target (MWh)	74,460	76,291 to 79,322
Achievement (MWh)	92,670	
Difference (MWh)	18,210	

## Planning

	2010 - 2011 Planning		2012 - 2013 Planning	
	Ten Year Potential (MWh)	2010 - 2011 Target (MWh)	Ten Year Potential (MWh)	2012 - 2013 Target (MWh)
<b>Total</b>	<b>430,992</b>	<b>74,460</b>	<b>399,000 to 402,031</b>	<b>76,291 to 79,322</b>

## Achievement

Conservation by Sector	2010 Achievement		2011 Achievement	
	MWh	Utility Expenditures (\$)	MWh	Utility Expenditures (\$)
Residential	13,490	2,730,526	14,280	2,742,024
Commercial	10,334	1,588,138	7,288	1,581,381
Industrial	11,189	2,298,418	13,926	2,380,440
Agriculture	-	-	-	-
Distribution Efficiency		141,674		429,965
Production Efficiency	-		-	156,067
NEEA	10,862	963,501	11,300	1,010,951
Conservation expenditures <i>NOT</i> included in sector expenditures				
<b>Customer outreach and comm</b>				278,233
<b>Portfolio Evaluation EM&amp;V</b>				315,733
<b>School Education Outreach Program</b>				195,446
<b>Additional residential administration</b>		1,249		2,675
<b>Total</b>	<b>45,876</b>	<b>7,723,506</b>	<b>46,794</b>	<b>9,092,913</b>

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## Utility Pacific Power

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**Methodology:** Per WAC 194-37-060 (3) briefly describe the methodology used to establish the utility's ten-year potential and biennial target to capture cost-effective conservation, including the share of this target to be captured by efficiency improvements in customer measures, and, if any, in distribution measures and production measures.

As permitted by WAC 480-109-010(1)(b)(i), PacifiCorp has elected to utilize its 2008 Integrated Resource Plan (“IRP”) for establishing its projected ten-year conservation potential for its Washington service area. PacifiCorp elected to utilize the 2008 IRP as the source for its conservation potential and biennial target as it more accurately represents the Company’s resource position, resource options and resource costs than does the regional power plan. More importantly, the 2008 IRP had available more representative data on the Company’s conservation potential in Washington. The Company’s 2008 IRP was informed by the conservation potential identified in PacifiCorp’s Assessment of Long-Term System-Wide Potential for Demand-Side and Other Supplemental Resources (“conservation potential assessment”). Completed in July 2007 by Quantec, LLC (now called the Cadmus Group, Inc.), the Company’s conservation potential assessment represents an independent and reliable assessment of the magnitude, timing, and costs of conservation potential available specific to PacifiCorp, providing the Company a significant advantage in the development of its Washington conservation potential and biennial target. Unlike the regional avoided cost average data and sales allocation methodology used in the regional power plan to approximate economic potential available to each utility in the region, the use of PacifiCorp’s 2008 IRP, informed by the service area specific conservation potential assessment, provides for the most reliable and accurate conservation forecast for both resource planning and the development of the Company’s Washington conservation potential and biennial target.

## Biennial Target Compared to Actual

### 2010 Biennial Target Compared to Actual

Energy Efficiency Program (Tariff Schedule #)	Actual 2010		
	kWh/Yr Savings (at generator)	Systems Benefits Charge Expenditures	
Low Income Weatherization (114)	200,315	\$ 447,320	
Energy Education in Schools (113)	2,613,152	\$ 439,978	
Refrigerator Recycling (107)	2,961,011	\$ 356,450	
<i>Refrigerator Recycling - Savings Reporting Adjustment</i>	(1,668,913)		
Home Energy Savings (118)	10,685,435	\$ 1,486,777	
<i>CFL Lighting - Savings Reporting Adjustment</i>	(276,162)		
CFL Adjustment Energy Education	(1,024,651)		
<b>Total Residential</b>	<b>13,490,188</b>	<b>\$ 2,730,526</b>	
Energy FinAnswer (125)	933,636	\$ 433,107	
FinAnswer Express (115)	9,400,837	\$ 1,155,031	
<b>Total Commercial</b>	<b>10,334,473</b>	<b>\$ 1,588,138</b>	
Energy FinAnswer (125)	8,703,203	\$ 1,896,292	
FinAnswer Express (115)	2,485,956	\$ 402,125	
<b>Total Industrial</b>	<b>11,189,160</b>	<b>\$ 2,298,418</b>	
Customer outreach and communications			
Portfolio Evaluation EM&V			
School Energy Education Outreach Program			
<b>Total - current Company programs</b>	<b>35,013,821</b>	<b>\$ 6,617,082</b>	
Northwest Energy Efficiency Alliance (NEEA)	4,768,375	\$ 963,501	
<i>NEEA - Savings Reporting Adjustment</i>	6,094,000		
Distribution Efficiency		\$ 141,674	
Production Efficiency			
<b>Total Company programs including, NEEA and other company initiatives</b>	<b>45,876,195</b>	<b>7,722,257</b>	
Add'l residential expenditures for administration related to prior programs		\$ 1,249	
<b>Total System Benefits Charge Expenditures</b>		<b>\$ 7,723,506</b>	
<b>Energy Efficiency Savings</b>	<b>Target 2010</b>	<b>Actual 2010</b>	<b>Percentage of Target</b>
Total Conservation aMW	4.34	5.2	121%
Total Conservation MWh	38,018	45,876	121%

#### Notes:

Conservation Biennial Target established as of July 2, 2010 Docket No. UE-100170

Actual savings at generator include line losses between the customer site and the generation source using the most current study as noted in the 2010 and 2011 Annual Report on Conservation Acquisition, except for NEEA where planning target and reported results are provided as site values.

## 2011 Biennial Target Compared to Actual

Energy Efficiency Program (Tariff Schedule #)	Actual 2011	
	kWh/Yr Savings (at generator)	Systems Benefits Charge Expenditures
Low Income Weatherization (114)	266,419	\$ 507,032
Energy Education in Schools (113)	2,445,597	\$ 234,481
Refrigerator Recycling (107)	3,147,598	\$ 316,400
<i>Refrigerator Recycling - Savings Reporting Adjustment</i>	(1,764,863)	
Home Energy Savings (118)	10,959,418	\$ 1,684,112
<i>CFL Lighting - Savings Reporting Adjustment</i>	(126,591)	
CFL Adjustment Energy Education	(647,572)	
<b>Total Residential</b>	<b>14,280,005</b>	<b>\$ 2,742,024</b>
Energy FinAnswer (125)	258,341	\$ 183,101
FinAnswer Express (115)	7,029,658	\$ 1,398,280
<b>Total Commercial</b>	<b>7,287,999</b>	<b>\$ 1,581,381</b>
Energy FinAnswer (125)	10,486,311	\$ 1,821,938
FinAnswer Express (115)	3,439,718	\$ 558,501
<b>Total Industrial</b>	<b>13,926,029</b>	<b>\$ 2,380,440</b>
Customer outreach and communications		\$ 278,233
Portfolio Evaluation EM&V		\$ 315,733
School Energy Education Outreach Program		\$ 195,446
<b>Total - current Company programs</b>	<b>35,494,034</b>	<b>\$ 7,493,255</b>
Northwest Energy Efficiency Alliance (NEEA)	12,397,774	\$ 1,010,951
<i>NEEA - Savings Reporting Adjustment</i>	(1,098,000)	
Distribution Efficiency		\$ 429,965
Production Efficiency		\$ 156,067
<b>Total Company programs including, NEEA and other company initiatives</b>	<b>46,793,807</b>	<b>9,090,238</b>
Add'l residential expenditures for administration related to prior programs		\$ 2,675
<b>Total System Benefits Charge Expenditures</b>		<b>\$ 9,092,913</b>

Energy Efficiency Savings	Target 2011	Actual 2011	Percentage of Target
Total Conservation aMW	4.13	5.34	129%
Total Conservation MWh	36,179	46,794	129%

Actual expenditures do not include \$3,748 related to new programs reported in 2011 Annual Report on Conservation Acquisition

Actual savings at generator include line losses between the customer site and the generation source using the most current study as noted in the 2010 and 2011 Annual Report on Conservation Acquisition, except for NEEA where planning target and reported results are provided as site values.

## 2010-2011 Biennial Target Compared to Actual

Energy Efficiency Program (Tariff Schedule #)	Actual 2010+2011	
	kWh/Yr Savings (at generator)	Systems Benefits Charge Expenditures
Low Income Weatherization (114)	466,735	\$ 954,352
Energy Education in Schools (113)	5,058,749	\$ 674,459
Refrigerator Recycling (107)	6,108,609	\$ 672,850
<i>Refrigerator Recycling - Savings Reporting Adjustment</i>	(3,433,777)	\$ -
Home Energy Savings (118)	21,644,853	\$ 3,170,889
<i>CFL Lighting - Savings Reporting Adjustment</i>	(402,753)	\$ -
CFL Adjustment Energy Education	(1,672,223)	\$ -
<b>Total Residential</b>	<b>27,770,193</b>	<b>\$ 5,472,550</b>
Energy FinAnswer (125)	1,191,978	\$ 616,208
FinAnswer Express (115)	16,430,495	\$ 2,553,311
<b>Total Commercial</b>	<b>17,622,472</b>	<b>\$ 3,169,519</b>
Energy FinAnswer (125)	19,189,515	\$ 3,718,230
FinAnswer Express (115)	5,925,674	\$ 960,627
<b>Total Industrial</b>	<b>25,115,189</b>	<b>\$ 4,678,857</b>
Customer outreach and communications	-	\$ 278,233
Portfolio Evaluation EM&V	-	\$ 315,733
School Energy Education Outreach Program	-	\$ 195,446
<b>Total - current Company programs</b>	<b>70,507,854</b>	<b>\$ 14,110,337</b>
Northwest Energy Efficiency Alliance (NEEA)	17,166,149	\$ 1,974,452
<i>NEEA - Savings Reporting Adjustment</i>	4,996,000	\$ -
Distribution Efficiency	-	\$ 571,639
Production Efficiency	-	\$ 156,067
<b>Total Company programs including, NEEA and other company initiatives</b>	<b>92,670,003</b>	<b>\$ 16,812,495</b>
Add'l residential expenditures for administration related to prior programs		\$ 3,924
<b>Total System Benefits Charge Expenditures</b>		<b>\$ 16,816,419</b>

Energy Efficiency Savings	2010+2011 Target	2010+2011 Actual	Percentage of Target
Total Conservation aMW	8.50	10.58	124%
Total Conservation MWh	74,460	92,670	124%

**Notes:**

Conservation Biennial Target established as of July 2, 2010 Docket No. UE-100170

Actual expenditures do not include \$3,748 related to new programs reported in 2011 Annual Report on Conservation Acquisition

Actual savings at generator include line losses between the customer site and the generation source using the most current study as noted in the 2010 and 2011 Annual Report on Conservation Acquisition, except for NEEA where planning target and reported results are provided as site values.

## Savings Reporting Adjustments

During the 2011 Washington Conservation Working Group, parties agreed “to the extent practicable, there should be consistency between the use of prescriptive unit energy savings estimates in the establishment of the biennial target and the reliance on those same savings estimates in the utility’s demonstration that it met the biennial target.”<sup>1</sup> Consistent with this approach, the results provided in the Company’s 2010 and 2011 reports have been adjusted incorporating the key planning assumptions used in establishing the 2010-2011 target. The adjustments are discussed in detail in the following sections.

### Appliance Recycling

The 2007 potential study utilized a simulation model for prototype residential dwellings; single family, multi-family and manufactured homes to estimate consumption of refrigerators and freezers in the home. Savings from this measure is the same as the consumption since the appliance is removed to generate the savings. The savings by appliance type varied slightly by home type based on the final calibration of all end use consumption. For the purpose of this analysis, savings by appliance type from all three types of home is averaged and is provided in Table 1. These unit energy savings are different than those used for reporting.

**Table 1**  
**Unit Energy Savings (UES) by Appliance and Home Type**  
**from 2007 Potential Study**

	Single Family	Multi-Family	Manufactured	Average
<b>Refrigerator</b>	536	569	583	<b>563</b>
<b>Freezer</b>	570	605	618	<b>598</b>

As a result, the Company is adjusting the reported savings from these measures to reflect the savings assumed in the 2007 potential study savings assumptions. The impact on savings reporting adjustments is provided in Tables 2 and 3 below.

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<sup>1</sup> Washington Conservation Working Group Consensus Document as of June 30, 2011.

**Table 2**  
**2010 Appliance Recycling Adjustment Calculations**

	<u>2010 kWh (site)</u>	<u>2010 units</u>	<u>UES</u>	<u>Source/notes</u>
<b>Refrigerators</b>	1,855,000	1,484	1,250	Information from 2010 Annual report - Table 7
	834,997	1,484	563	Calculate revised savings with average UES from 2007 potential study
	(1,020,003)			Calculate difference between reported and revised totals (kWh)
	(1,020)			Convert kWh to mWh
	(1,119)			Include impact of residential line losses at 8.87% (divide by 1 - 0.0887)
	<b>(1,119)</b>			<b>Adjustment to 2010 reported results for refrigerators</b>
<b>Freezers</b>	739,347	399	1,853	Information from 2010 Annual report - Table 7
	238,469	399	598	Calculate revised savings with average UES from 2007 potential study
	(500,878)			Calculate difference between reported and revised totals (kWh)
	(501)			Convert kWh to mWh
	(550)			Include impact of residential line losses at 8.87% (divide by 1 - 0.0887)
	<b>(550)</b>			<b>Adjustment to 2010 reported results for freezers</b>

**Table 3**  
**2011 Appliance Recycling Adjustment Calculations**

	<u>2011 kWh (site)</u>	<u>2011 units</u>	<u>UES</u>	<u>Source/notes</u>
<b>Refrigerators</b>	2,030,000	1,624	1,250	Information from REVISED 2011 Annual report - Table 7
	913,771	1,624	563	Calculate revised savings with average UES from 2007 potential study
	(1,116,229)			Calculate difference between reported and revised totals (kWh)
	(1,116)			Convert kWh to mWh
	(1,225)			Reported UES -without storage ( divide total kWh by 0.8)
	<b>(1,225)</b>			<b>Adjustment to 2011 reported results for refrigerators</b>
<b>Freezers</b>	726,376	392	1,853	Information from REVISED 2011 Annual report - Table 7
	234,285	392	598	Calculate revised savings with average UES from 2007 potential study
	(492,091)			Calculate difference between reported and revised totals (kWh)
	(492)			Convert kWh to mWh
	(540)			Include impact of residential line losses at 8.87% (divide by 1 - 0.0887)
	<b>(540)</b>			<b>Adjustment to 2011 reported results for freezers</b>

## Compact Florescent Lamps (“CFL”)

The 2007 potential study estimated overall residential lighting savings on a lighting power density basis using the prototype residential models for single family, multi-family and manufactured homes. Unit energy savings for a typical socket were developed so measure levelized costs could be estimated. Unit energy savings for reporting were calculated on a wattage specific basis using 2.3 hours per day and a 20 percent storage factor. For the purposes of this analysis, the average per lamp savings used for reporting were calculated and compared to the average per lamp savings used for planning purposes. The reported average savings were different than those used for planning.

As a result, the Company is adjusting the reported savings from these measures to reflect the savings assumed in the 2007 potential study. The typical socket assumptions and calculation of the planning CFL UES are shown in Table 4. This estimate does not include the effect of the storage factors which is a delivery, not a planning assumption.

**Table 4**  
**Calculation of CFL UES from 2007 potential study values**

	<b>Value</b>	<b>Notes/Source</b>
<b>Baseline watts</b>	60	Planning assumption
<b>CFL watts</b>	15	Planning assumption
<b>Difference in watts</b>	45	Calculation
<b>Convert difference in watts to kilowatts</b>	0.045	Calculation
<b>Hours/day</b>	2.5	Planning assumption
<b>Days/year</b>	365	
<b>CFL UES (kWh)</b>	<b>41</b>	Calculation

The impact on savings reporting adjustments is provided in Tables 5 and 6 below. Adjustments to reported CFL savings is utilizing the planning UES assumption and the impact and storage factor.

**Table 5**  
**2010 CFL adjustment calculations**

	<u>2010 kWh (site)</u>	<u>2010 units</u>	<u>Average UES</u>	<u>Source/notes</u>
<b>CFLs (twister)</b>	4,265,723	125,261	34	Reported UES with 20% storage factor - calculated. 2010 annual report - Table 5
	5,332,154	125,261	43	Reported UES -without storage ( divide total kWh by 0.8)
	5,135,701	125,261	41	Calculate savings with average UES from 2007 potential study - 41 kWh * units
	4,108,561			Apply 20% storage to revised kWh calculated with revised UES
	(157,162)			Calculate difference between reported and revised totals (kWh)
	(157)			Convert kWh to mWh
	(172)			Include impact of residential line losses at 8.87% (divide by 1 - 0.0887)
	<b>(172)</b>			<b>Adjustment to 2010 reported results for CFL (twisters)</b>
<b>CFLs (specialty)</b>	3,131,030	92,577	34	Reported UES with 20% storage factor - calculated. 2010 annual report - Table 5
	3,913,788	92,577	42	Reported UES -without storage ( divide total kWh by 0.8)
	3,795,657	92,577	41	Calculate savings with average UES from 2007 potential study - 41 kWh * units
	3,036,526			Apply 20% storage to revised kWh calculated with revised UES
	(94,504)			Calculate difference between reported and revised totals (kWh)
	(95)			Convert kWh to mWh
	(104)			Include impact of residential line losses at 8.87% (divide by 1 - 0.0887)
	<b>(104)</b>			<b>Adjustment to 2010 reported results for CFLs (specialty)</b>

**Table 6**  
**2011 CFL Adjustment calculations**

	<u>2011 kWh (site)</u>	<u>2011 units</u>	<u>Average UES</u>	<u>Source/notes</u>
<b>CFLs (twister)</b>	5,320,237	152,997	35	Reported UES with 20% storage - calculated REVISED 2011 annual report - Table 5
	6,650,296	152,997	43	Reported UES -without storage ( divide total kWh by 0.8)
	6,272,877	152,997	41	Calculate savings with average UES from 2007 potential study - 41 kWh * units
	5,018,302			Apply 20% storage to revised kWh calculated with revised UES
	(301,935)			Calculate difference between reported and revised totals (kWh)
	(302)			Convert kWh to mWh
	(331)			Include impact of residential line losses at 8.87% (divide by 1 - 0.0887)
	<b>(331)</b>			<b>Adjustment to 2011 reported results for CFLs (twister)</b>
<b>CFLs (specialty)</b>	2,697,203	87,920	31	Reported UES with 20% storage - calculated REVISED 2011 annual report - Table 5
	3,371,504	87,920	38	Reported UES -without storage ( divide total kWh by 0.8)
	3,604,720	87,920	41	Calculate savings with average UES from 2007 potential study - 41 kWh * units
	2,883,776			Apply 20% storage to revised kWh calculated with revised UES
	186,573			Calculate difference between reported and revised totals (kWh)
	187			Convert kWh to mWh
	205			Include impact of residential line losses at 8.87% (divide by 1 - 0.0887)
	<b>205</b>			<b>Adjustment to 2011 reported results for CFLs (specialty)</b>

The difference in reported UES's is attributable to differences in CFL wattages that moved through the retail buy down channel during the period(s).

#### Northwest Energy Efficiency Alliance (“NEEA”)

In the Company's 2010 Annual Report on Conservation Acquisition in Washington (filed on March 31, 2011), the Company reported a 57 percent negative variance between forecasted savings and reported savings associated with the Company's investments in NEEA. The variance was the result of NEEA adjusting its savings baseline used to calculate gross regional savings for the year, post the April 2010 forecast it provided to PacifiCorp of expected 2010 and 2011 savings contributions

Utilizing the NEEA baseline assumptions relied upon in setting the Company's 2010 and 2011 biennial target, NEEA's revised results for 2010 are closer to the initial forecast provided PacifiCorp in April, 2010. The consensus agreement regarding frozen planning assumptions was in place when the Company prepared the 2011 Report on Conservation

Acquisition in Washington (filed on March 31, 2012) however, NEEA had yet to finalize its 2011 results. PacifiCorp's reported NEEA savings in the 2011 Report on Conservation reflected this by noting the savings as "preliminary".

The following table documents the adjustments to the Company's NEEA savings initially reported in the 2010 and 2011 reports on conservation acquisitions filed in March, 2010 and 2011, respectively. The revised savings were provided by NEEA to PacifiCorp in a May 8, 2012, Memorandum, which explains the adjustment to the baseline, actions taken to correct the baseline, and the impact on final reported savings. See Appendix 1 for detail.

**Table 7**  
**Revised NEEA savings 2010 and 2011 (MWh)**

	April, 2010 Forecast (site)	Initial savings reported (site)	Revised savings (site)	Net Adj
<b>2010</b>	11,201	4,768	10,862	6,094
<b>2011</b>	12,112	12,398	11,300	(1,098)
<b>Total Adj</b>				4,996

The net effect of all adjustments applied to the 2010-2011 biennial targets is an increase of 1,159 MWh or 0.13 aMW. These adjustments include the effects of line losses.<sup>2</sup> Table 8 provides detail by adjustment type and reporting year.

**Table 8**  
**Adjustments by Type and Year (MWh)**

Adjustment (mWh)	2010	2011	Total
Refrigerator	(1,119)	(1,225)	(2,344)
Freezer	(550)	(540)	(1,090)
Twister	(172)	(331)	(504)
Specialty	(104)	205	101
NEEA	6,094	(1,098)	4,996
Total	4,149	(2,989)	1,159
aMW	0.47	(0.34)	0.13

<sup>2</sup> Except for NEEA where the planning target and reported results are both based on site values.

Table 9 provides detail by adjustment type in kWh and reporting year.

**Table 9**  
**Adjustments by Type and Year (kWh)**

Adjustment (kWh)	2010	2011	Total
Refrigerator	(1,119,283)	(1,224,876)	(2,344,159)
Freezer	(549,630)	(539,988)	(1,089,618)
Twister	(172,459)	(331,324)	(503,783)
Specialty	(103,703)	204,733	101,030
NEEA	6,094,000	(1,098,000)	4,996,000
Total	4,148,925	(2,989,454)	1,159,470

## Supporting Documents for Conservation

Provided below are links to supporting documents relied upon in support of the Company's planning assumptions and associated reporting of actual savings results for the 2010-2011 Biennial Conservation.

1. Assessment of Long-Term, System-Wide Potential for Demand-Side and Other Supplemental Resources, Volumes I and II (July 11, 2007) – Conservation Potential Assessment

<http://www.pacificorp.com/es/dsm.html>

2. 2010 and 2011 Annual Report(s) on Conservation Acquisition

<http://www.pacificorp.com/es/dsm/washington.html>

3. Revised Report on its Ten-year Achievable Conservation Potential and its Biennial Conservation Target for 2010 and 2011, filed in Docket UE-100170 on July 2, 2010

<http://www.utc.wa.gov/docs/Pages/FilingIdBrowser.aspx>

4. Demand-side Management Business Plan – Washington, November 2010 Update filed November 1, 2010 in Docket UE-100170.

<http://www.utc.wa.gov/docs/Pages/FilingIdBrowser.aspx>

5. Independent third-party process and impact evaluations completed during the 2010-2011 biennium, validating program results, assessing ex-post program savings and providing information used to inform future conservation potential assessments, conservation forecasts and the establishment of targets. See Appendix 3 for more information on verification of measure installations.

<http://www.pacificorp.com/es/dsm/washington.html>

6. Collaborative group documents completed last summer demonstrating Company's and other utilities' alignment with planning methodologies used by the Northwest Power and Conservation Council – Reference Appendix 3 Comparison of Regional Methodologies of the Company's Ten-year Achievable Conservation Potential and its Biennial Conservation Target for 2012 and 2013, filed in Docket UE-111880 on January 31, 2012.

<http://www.utc.wa.gov/docs/Pages/FilingIdBrowser.aspx>

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## **Appendices**

Appendix 1 – NEEA Memorandum of 2010-2011 Final Savings

Appendix 2 – 2010-2011 Plan Condition Requirements and Compliance

Appendix 3 – PacifiCorp Measure Installation Verifications

# Appendix 1

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NEEA Memorandum  
of 2010-2011 Final Savings

Pacific Power

# Memorandum



May 8, 2012

TO: Jeff Bumgarner, Pacific Power; Don Jones, Pacific Power

FROM: Christina Steinhoff, NEEA Planning Analyst III

CC: Jeff Harris, NEEA Director of Emerging Technologies; Susan Hermenet, NEEA Senior Manager of Market Operations Planning

SUBJECT: 2010-2011 Final Savings Report—Pacific Power

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This memo summarizes Pacific Power’s 2010 and 2011 savings estimates relative to its targets. NEEA bases the targets on a report it provided Pacific Power in April 2010. The current estimates apply the same baseline assumptions as those NEEA used to set the targets. The following sections summarize the savings variance from the targets and explain the methodology of calculating the savings.

## Variance from Targets set in April 2010

NEEA estimates that Pacific Power reached its Net Market Effects targets for NEEA’s 2010 and 2011 savings as well as its Total Regional Savings target for 2010. However, Pacific Power fell just short of reaching its Total Regional Savings target for 2011. Table 1 shows the results.

Table 1: aMW Savings Estimate versus the Target for Pacific Power Washington

	Total Regional Savings		Net Market Effects	
	Current	Target	Current	Target
2010	3.2	3.1	1.2	1.1
2011	3.1	3.5	1.3	1.3

*The savings are for Pacific Power only. The Target is based on Pacific Power Washington’s funder share using the April 2010 NEEA Savings Report.*

## Variance from March 2012 Savings Estimates

NEEA provided Pacific Power on March 15, 2012 an estimate of the 2010 and 2011 savings. The report used preliminary estimates for CFL bulb sales. NEEA has since updated the sales. The 2010 CFL sales estimate decreased from 20.2 million to 18.7 million. The 2011 sales estimate increased

from 13.4 million to 15.9 million. The changes came from further analysis of 2011 sales data NEEA collected from Wal-Mart. The overall effect is a lower energy savings estimate for 2010 and a higher savings estimate for 2011.

## Methodology

At Pacific Power’s request, NEEA uses fixed baseline assumptions from April 2010. The baseline assumptions match the same assumptions that Pacific Power used to set its targets for NEEA savings. In order to compare the savings with the targets, NEEA holds the savings rate and Naturally Occurring Baseline assumptions fixed.

- NEEA uses the same savings rate baseline and technical assumptions (such as hours of use) that it used in April 2010.
- NEEA applies the same Naturally Occurring Baseline Market Share forecast as in its April 2010 report. NEEA uses this forecast to estimate the savings that would have occurred without a NEEA or local program (Net Market Effects).
- NEEA allocates the savings to Pacific Power based on its funder share. Pacific Power receives the “current funding cycle” share in Table 3 for savings from currently funded work. It receives the “previous funding cycle” share for previously funded initiatives such as the Residential Lighting Initiative.

Table 2: PacifiCorp’s Funder Share

	Pacific Power	Rocky Mountain Power
<b>Current Funding Cycle</b>	3.04%	0.00%
<b>Previous Funding Cycle</b>	2.56%	1.29%

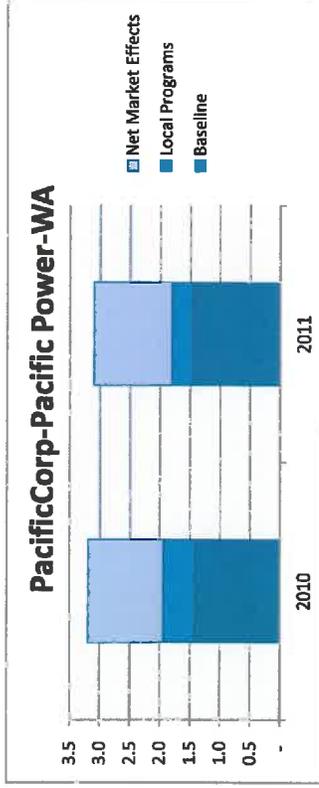
The enclosed spreadsheet shows Pacific Power’s savings by initiative.

# PacificCorp-Pacific Power-WA: Site-based Electric Energy Savings from NEEA Initiatives

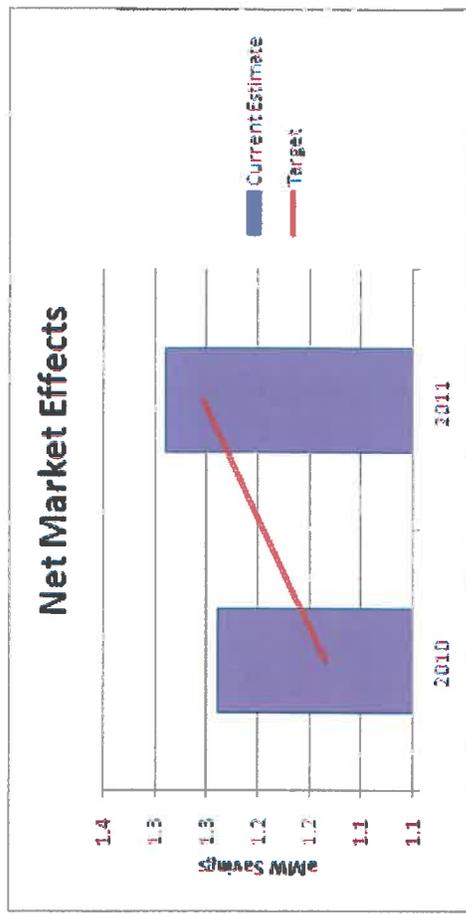
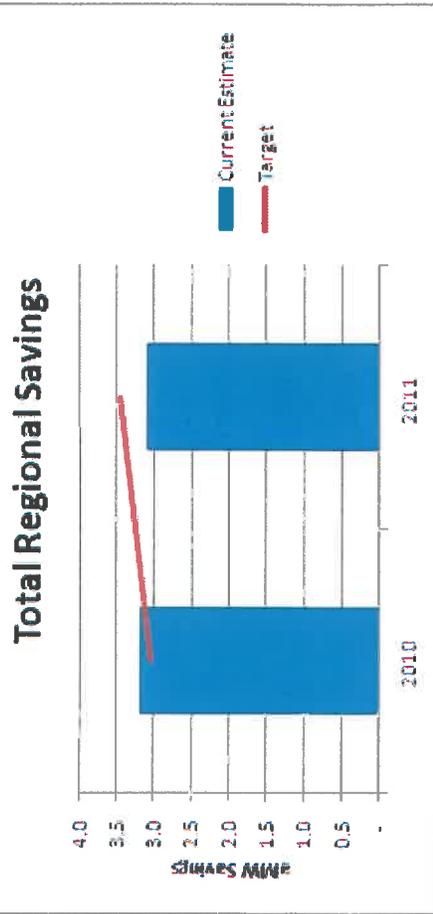
## Summary

Report Criteria Selection	
<b>Funder</b>	PacificCorp-Pacific Power-WA
<b>Funding Cycle</b>	Current and Previous
<b>Baseline</b>	Other
The baseline is held constant. These factors come from the assumptions NEEA used in its 2010 and 2010 forecast sent to Pacific Power in April 2010.	
Allocation Method	
<b>Funder Share: NEEA uses the funder's allocation share and applies it to the regional savings</b>	
Current Funding Cycle (2010-2014)	3.04%
Previous Funding Cycle (Pre 2010)	2.56%
<b>Units: Site-based Savings Reports in average megawatts</b>	

PacificCorp-Pacific Power-WA		
	2010	2011
Total	3.19	3.10
Baseline	1.43	1.47
Local Programs	0.52	0.34
Net Market Effects	1.24	1.29



Summary of Savings Versus the Target



PacificCorp-Pacific Power-WA

	Total Regional Savings		Net Market Effects	
	Current	Target	Current	Target
2010	3.2	3.1	1.2	1.1
2011	3.1	3.5	1.3	1.2

1.13528034

1.25972

2010	Savings By Initiative	
PacificCorp-Pacific Power-WA	NEEA Savings Report	
Initiative	Total Regional Savings (aMW)	Net Market Effects (aMW)
<b>Total</b>	<b>3.19</b>	<b>1.24</b>
<b>Residential</b>	<b>2.43</b>	<b>0.71</b>
Efficient Homes	0.02	0.00
Clothes Washers	0.19	0.06
Dishwashers	0.05	0.02
Ductless Heat Pumps	0.08	0.01
Heat Pump Water Heaters	-	-
Other Residential Standards (clothes Washers)	0.33	0.03
Refrigerators	0.05	0.00
Residential Codes	0.03	0.02
Residential Lighting	1.10	0.25
Televisions	0.53	0.30
Windows	0.05	0.02
<b>Commercial</b>	<b>0.51</b>	<b>0.41</b>
Building Operations	0.01	-
Building Operator Certification	0.05	0.03
Commercial Codes	0.08	0.05
Commercial Desktops	0.29	0.27
Commercial Lighting Solutions	-	-
Commercial New Construction	0.02	0.01
Commercial Real Estate	0.04	0.04
Commercial Standards	-	-
Commissioning	0.01	0.01
Existing Building Renewal	-	-
Healthcare	0.01	0.01
<b>Industrial</b>	<b>0.25</b>	<b>0.12</b>
Agriculture	0.00	0.00
BacGen	-	-
Drive Power	0.13	0.08
Evaporative Fan	0.02	-
Food Processors	0.08	0.03
Magna Drive	0.01	0.01
Pneu-Logic	0.00	0.00
Small/Medium Industrial	-	-
Verdiem	0.01	0.00

2011	Savings By Initiative	
PacificCorp-Pacific Power-WA	NEEA Savings Report	
Initiative	Total Regional Savings (aMW)	Net Market Effects (aMW)
<b>Total</b>	<b>3.10</b>	<b>1.29</b>
<b>Residential</b>	<b>2.22</b>	<b>0.67</b>
Efficient Homes	0.01	-
Clothes Washers	0.19	0.06
Dishwashers	0.04	0.02
Ductless Heat Pumps	0.07	0.02
Heat Pump Water Heaters	-	-
Other Residential Standards (clothes Washers)	0.30	0.02
Refrigerators	0.04	0.00
Residential Codes	0.05	0.04
Residential Lighting	0.58	0.04
Televisions	0.86	0.45
Windows	0.06	0.03
<b>Commercial</b>	<b>0.61</b>	<b>0.48</b>
Building Operations	-	-
Building Operator Certification	0.01	0.00
Commercial Codes	0.07	0.04
Commercial Desktops	0.34	0.32
Commercial Lighting Solutions	0.00	-
Commercial New Construction	-	-
Commercial Real Estate	0.14	0.11
Commercial Standards	-	-
Commissioning	(0.00)	(0.00)
Existing Building Renewal	-	-
Healthcare	0.05	0.00
<b>Industrial</b>	<b>0.27</b>	<b>0.14</b>
Agriculture	0.00	0.00
BacGen	0.00	-
Drive Power	0.13	0.09
Evaporative Fan	0.03	-
Food Processors	0.11	0.05
Magna Drive	-	-
Pneu-Logic	0.00	-
Small/Medium Industrial	-	-
Verdiem	-	-

# PacificCorp-Pacific Power-WA Site-based Electric Energy Savings from NEEA Initiatives

PacificCorp-Pacific Power-WA Funder Allocation

Pulled on: 5/1/2012

Category	Measures	Initiative Life Cycle Phase (see key below)	NEEA Savings Report									
			NEEA Total Regional Savings		NEEA Estimate of Local Programs		NEEA Estimate of Naturally Occurring Baseline		Net Market Effects			
			2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
All NEEA Initiatives			3.2	3.1	0.5	0.3	1.4	1.5	1.2	1.3		
Efficient Homes	Efficient Homes	Implementation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Energy Codes (sf)-ID IECC 2006	Implementation	0.0	0.0	-	-	-	-	-	-	0.0	0.00
	Energy Codes (sf)-MT IECC 2003 w/amend.	Implementation	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	0.00
	Energy Codes (sf)-OR ORSC 2008	Implementation	0.0	0.0	-	-	-	-	-	-	0.0	0.01
	Energy Codes (sf)-WA WSEC 2006	Implementation	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	0.00
	Energy Codes (sf)-ID IECC 2009	Implementation	-	0.0	-	-	-	0.0	-	-	-	0.00
	Energy Codes (sf)-MT IECC 2009 w/amend.	Implementation	-	0.0	-	-	-	0.0	-	-	-	0.00
	Energy Codes (sf)-OR ORSC 2011	Implementation	-	0.0	-	-	-	0.0	-	-	-	0.00
	Energy Codes (sf)-WA WSEC 2009	Implementation	-	0.0	-	-	-	0.0	-	-	-	0.01
	ENERGY STAR 3.0+20% and above	Implementation	0.5	0.9	-	-	0.2	0.4	0.3	0.45	-	-
Heat Pump Water Heaters	Assessment	-	-	-	-	-	-	-	-	-	-	
Ductless Heat Pumps	Zonal Single Family Homes	Implementation	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.02
	Forced Air Furnace Single Family	Implementation	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-
	Other Residential Codes-ID IECC 2006	Implementation	0.0	0.00	-	-	-	-	-	-	0.0	0.00
	Other Residential Codes-MT IECC 2003 w/amend.	Implementation	0.0	0.00	-	-	0.0	0.0	0.0	0.0	0.0	0.00
Multifamily Codes	Other Residential Codes-OR ORSC 2008	Implementation	0.0	0.00	-	-	-	-	-	0.0	0.0	0.00
	Other Residential Codes-WA WSEC 2006	Implementation	0.0	0.01	-	-	0.0	0.0	0.0	0.0	0.0	0.01
	Other Residential Codes-ID IECC 2009	Implementation	-	0.00	-	-	-	0.0	-	-	-	0.00
	Other Residential Codes-MT IECC 2009 w/amend.	Implementation	-	0.00	-	-	-	0.0	-	-	-	0.00
	Other Residential Codes-OR ORSC 2011	Implementation	-	-	-	-	-	-	-	-	-	-
Residential Lighting	Lighting - General	Implementation	0.6	0.1	0.2	0.0	0.3	0.1	0.1	0.01	0.01	0.03
	Lighting - Specialty	Transition Complete	0.5	0.4	0.2	0.1	0.2	0.3	0.1	0.1	0.03	0.03
	Lighting - Fixtures	Transition Complete	-	-	-	-	-	-	-	-	-	-
	Dishwashers	Transition Complete	0.1	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.02
White Goods	Refrigerator	Transition Complete	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	0.00
	Clothes Washers Above Standards	Transition Complete	0.2	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.06
	Clothes Washers Standards	Transition Complete	0.3	0.3	-	-	0.3	0.3	0.3	0.0	0.0	0.02
	Windows U-value 0.35	Transition Complete	0.1	0.1	-	-	0.0	0.0	0.0	0.0	0.0	0.03
Residential Standards	Other Residential Standards (2010-2014)	Transition Complete	-	-	-	-	-	-	-	-	-	-
	Existing Building Renewal	Concept Development	2.4	2.2	0.4	0.2	1.3	1.3	0.7	0.7	0.7	0.7

Category	Measures	Initiative Life Cycle Phase (see key below)	NEEA Savings Report									
			NEEA Total Regional Savings		NEEA Estimate of Local Programs		NEEA Estimate of Naturally Occurring Baseline		Net Market Effects			
			2010	2011	2010	2011	2010	2011	2010	2011		
Commercial Buildings	Commercial Lighting Solutions	Concept Development	-	0.0	-	0.0	-	-	-	-	-	-
	Building Operations	Transition Complete	0.0	-	0.0	-	0.0	-	-	-	-	-
	Building Operator Certification	Strategy Development	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0
	Commissioning	Transition Complete	0.0	(0.0)	-	(0.0)	-	(0.0)	0.0	(0.0)	0.0	(0.0)
	Commercial Real Estate	Transition Complete	0.0	0.1	-	0.0	-	0.0	0.0	0.0	0.0	0.1
	Healthcare	Transition Complete	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
	Commercial New Construction	Transition Complete	0.0	-	0.0	-	-	-	0.0	-	0.0	-
	80 Plus	Transition Complete	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
	ENERGY Star 5.0	Transition Complete	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
	Verdiem	Verdiem Network Energy Management	Transition Complete	0.0	-	0.0	-	-	-	0.0	-	0.0
Commercial Codes	ID (2000 IECC, 2003 IECC)	Implementation	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0.0
	MT (2003 IECC w/amend)	Implementation	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0.0
	OR (2004 OSSC)	Implementation	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0.0
	WA (2000 WSEC, emergency changes)	Implementation	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0.0
	WA (2004 WSEC)	Implementation	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0.0
	ID (2006 IECC)	Implementation	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0.0
	OR (2007 OSSC)	Implementation	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0.0
	WA (2006 WSEC)	Implementation	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0.0
	ID (2009 IECC)	Implementation	-	0.0	-	-	-	-	-	0.0	-	0.0
	MT (2009 IECC w/amend)	Implementation	-	0.0	-	-	-	-	-	0.0	-	0.0
Commercial Standards	OR (2009 OEESC)	Implementation	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0.0
	WA (2010 WSEC)	Implementation	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0.0
	Other Commercial Standards	Implementation	-	-	-	-	-	-	-	-	-	-
	<b>Total Commercial</b>		<b>0.5</b>	<b>0.6</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.4</b>	<b>0.5</b>
	Small/Medium Industrial	Assessment	-	-	-	-	-	-	-	-	-	-
	Food Processors	Implementation	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	Drive Power	Drive Power Motors	Transition Complete	0.1	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0
		Drive Power Standards	Transition Complete	-	0.1	-	0.0	-	0.0	-	-	0.0
		Drive Power Rewinds	Transition Complete	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
	Magna Drive	MagnaDrive	Transition Complete	0.0	-	-	-	-	-	-	0.0	-
Evaporative Fan	Evaporative Fan Variable Frequency Drive	Transition Complete	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	
BacGen	BacGen	Transition Complete	-	0.0	-	0.0	-	-	0.0	-	-	
Pneu-Logic	Pneu-Logic (SAV-AIR)	Transition Complete	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	
<b>Total Industrial</b>			<b>0.2</b>	<b>0.3</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	
Agriculture	AM400 Data Logger	Transition Complete	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	
<b>Total Agriculture</b>			<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	

# Appendix 2

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2010-2011

Plan Condition Requirements and Compliance

Pacific Power

## 2010-2011 Plan Condition Requirements and Compliance

<b>Docket UE-100170 Order 02 (2)</b>		
Requires PacifiCorp to use methodologies consistent with those used by the Council.	Appendix 3 of PacifiCorp's Ten-Year Conservation Potential and Biennial Conservation Target report filed in Docket UE-100170 contains an outline of the methodology used and provided by the Northwest Power and Conservation Council in the development of the regional power plan along with a description of the Company's aligning methodology. This work was expanded upon in Appendix 3 of PacifiCorp's Ten-Year Conservation Potential and Biennial Conservation Target report filed in Docket UE-111880. It contains work product further refined by the Methodology Sub-Committee of the Washington Collaborative Working group (summer 2011) and includes Avoided Costs and Total Resource Cost determinants. Together these documents demonstrate the consistency of the methodologies used in the development of both resource plans and development of the Company's ten-year conservation forecast.	✓
<b>Docket UE-100170 Order 02 (3) (a) (i)</b>		
The Company will consult with the DSM Advisory Group on the development of a written framework for evaluation, measurement, and verification (EM&V) as implemented by PacifiCorp which guides its approach to evaluation, measurement, and verification of energy savings. This framework must be reflected in the Biennial Conservation Plan for the next biennium, 2012-2013	The development of a written EM&V framework in collaboration with the DSM Advisory Group is described in the "Utility Evaluation, Measurement and Verification Activities" section of the Ten-Year Conservation Potential and Biennial Conservation Target report filed in Docket UE-111880; a copy of the EM&V framework is also provided as Appendix 8 to that report.	✓
<b>Docket UE-100170 Order 02 (3) (a) (ii)</b>		
The Company will consult with the DSM Advisory Group on development of conservation potential assessments under RCW 19.285.040(1)(a) and WAC 480-109-010(1).	The preparatory work for the 2007 and 2011 conservation potential assessments, used in the development of the 2008 and 2011 IRPs and consequently both the 2010-19 and 2012-21 I-937 conservation forecasts, were completed prior to the issuance of Order 02 in Docket UE-100170. However, Company engaged the DSM advisory group in a review of the sources and assumptions of the conservation forecasts and adjustments prior to their filing and approvals. This process as well as detailed explanations of the adjustments made is documented in the Ten-Year Conservation Potential and Biennial Conservation Target reports filed in Dockets UE-100170 and UE-111880, in the stakeholder engagement section in the main report and appendix 4, adjustments section, to those reports.	✓
<b>Docket UE-100170 Order 02 (3) (c)</b>		
The Advisory Group should meet quarterly at a minimum.	A list of 2010 and 2011 Advisory Group meetings, including Washington Collaborative Working Group meetings, is provided in the company's 2010 and 2011 Annual Reports on Conservation Acquisition (filed in March each year). They demonstrate PacifiCorp's compliance to the	✓

	requirement for quarterly advisory group meetings.	
<b>Docket UE-100170 Order 02 (5)</b>		
Company must maintain its conservation tariffs with program descriptions on file with the Commission. Program details about specific measures, incentives, and eligibility requirements must be filed as tariff attachments or as revisions to the Company DSM Business Plan.	Copies of the Company’s conservation tariffs and/or program descriptions, including details on specific measures, incentives and eligibility are contained in Attachment A, the company’s Demand-Side Management Business Plan for 2010–2011 filed in Docket UE-100170. This information was refreshed in the company’s update to the 2010-11 Business Plan filed November 1, 2011 and again as Appendix 7, Demand-Side Management Business Plan 2012-13, filed in Docket UE-111880.	✓
<b>Docket UE-100170 Order 02 (6) (b) &amp; (c)</b>		
PacifiCorp must use RTF deemed savings or other reliable and relevant source data that has verified savings levels and be presented to the Advisory Group for comment.	The preparatory work for the 2007 and 2011 conservation potential assessments, used in the development of the 2008 and 2011 IRPs and consequently both the 2010-19 and 2012-21 I-937 conservation forecasts, were completed prior to the issuance of Order 02 in Docket UE-100170. However, the data sources for the 2011 Conservation Potential Assessment are outlined beginning on page 53 of Volume I of the “Assessment of Long-Term System-Wide Potential for Demand-Side and Other Supplemental Resources” which is provided as Appendix 2 to the Ten-Year Conservation Potential and Biennial Conservation Target report filed in Docket UE-111880. Volume II, Appendix E of that report provides a comparison of savings values. An electronic version of this spreadsheet was provided to the DSM Advisory Group on August 16, 2011. Current RTF savings data also informed several of the adjustments to the Company’s current ten-year conservation forecast; after consultation with the DSM Advisory Group. Adjustments are described in both the “Conservation Potential and Conservation Targets” section as well as in Appendix 4 of the Ten-Year Conservation Potential and Biennial Conservation Target report. In addition, supporting documentation for the proposed Home Energy Savings program changes included savings data sources and was provided to the Advisory Group for comment.	✓
<b>Docket UE-100170 Order 02 (6) (f)</b>		
PacifiCorp must spend between four and six percent of its conservation budget on EM&V.	As documented in the company’s 2010 and 2011 annual reports on conservation acquisition (filed in March), the company spent \$987,623 on third-party evaluation, measurement and verification (process and impact evaluations) of its conservation program results over the two year period. This represents 5.9% of the company’s \$16,816,419 (excluding new program cost of \$3,748) in conservation expenditures over the same period.	✓
<b>Docket UE-100170 Order 02 (7) (a)</b>		
PacifiCorp must offer a mix of tariff-based programs that ensure it is serving each customer sector, including limited income customers.	For a full list of PacifiCorp programs see Attachment A, “Demand-Side Management Business Plan – Washington 2010–2011” filed in Docket UE-100170 and the update to this business plan filed November 1, 2011. Also reference Appendix 7 to the Ten-Year Conservation Potential and Biennial Conservation Target report, “PacifiCorp’s Washington Demand-side Management 2012-2013 Business Plan” filed in Docket UE-111880. These business plans contain program details	✓

	demonstrating the breadth of program services available to Pacific Power customers to assist them with the conservation projects. Residential customers currently have four programs available, including a no cost weatherization offer for income qualified customers and comprehensive program with incentives for conservation projects/upgrades in both the new construction and retrofit markets. Business customers have access to two comprehensive programs (also available to both the new construction and retrofit markets) which provide both prescriptive (pre-calculated \$/units) incentives and site specific calculated incentives. In addition, NEEA delivers regional initiatives benefiting customers across all customer groups.	
<b>Docket UE-100170 Order 02 (7) (b)</b>		
PacifiCorp must establish a strategy and proposed total planned expenditures for informing participants about program opportunities. The planned expenditures will include expenditures by PacifiCorp directly and not those of the Company's third party program delivery administrators who are primarily or solely contracted for program delivery. PacifiCorp will share these strategies and expenditures with the Advisory Group for review and comments.	Costs to fund a communications plan were added to the revised business plan filed in Docket UE-100170 on November 1, 2010. The communication plan was reviewed with the advisory group on March 18, 2011 and implementation began a month later, April, 2011.  Information and costs associated with the 2012-2013 Outreach and Communications plan were provided in Appendix 7, DSM Business Plan, to the company's Ten-Year Conservation Potential and Biennial Conservation Target report filed in Docket UE-111880.	✓
<b>Docket UE-100170 Order 02 (7) (c)</b>		
PacifiCorp must offer a cost-effective portfolio of programs in order to achieve all available conservation that is cost-effective, reliable and feasible. Programs, program services, and incentives may be directed to consumers, retailers, manufacturers, trade allies or other relevant market actors as appropriate for measures or activities that lead to electric energy savings. Incentive levels and other methods of encouraging energy conservation need to be examined periodically for effectiveness in fulfilling the Company's obligation under WAC 480-109. To the degree the portfolio remains cost-effective, incentive levels and implementation methods should not unnecessarily limit the acquisition of all achievable energy conservation.	Pacific Power conservation programs are prospectively analyzed for cost-effectiveness as proposed (new programs) and as part of the filing of biennial business plans required under I-937 (existing programs). They are also analyzed retrospectively in the annual reports on conservation acquisitions (filed in March) and on a two year basis by third-party consultants conducting independent impact and process evaluations.  Cost-effectiveness is also run prospectively to evaluate program changes that may be proposed in between business plan updates.  Collectively these reviews ensure the company maintains a cost-effective conservation portfolio and has the information needed to assist in program design changes to maximize program performance.	✓
<b>Docket UE-100170 Order 02 (7) (d)</b>		
PacifiCorp may spend up to 10 percent of its conservation budget on programs whose savings impact has not yet been measured, as long as the overall portfolio of conservation passes the Total Resource Cost (TRC) test. These programs may include educational, behavior change, and pilot projects.	PacifiCorp did not propose or spend any of its conservation budget during the 2010-11 biennium period on conservation programs whose savings impact was not measured and reported.	✓

The Company may ask the Commission to modify this spending limit following full Advisory Group consultation.		
<b>Docket UE-100170 Order 02 (8) (a) - (h)</b>		
Required reports and filings.	The Company has met the compliance report requirements in Docket UE-100170 Order 02 (8) (a) – (e) relevant to the 2010-2011 biennium period. The submission of this report satisfies the remaining compliance requirements in Docket UE-100170 Order 02 (8) (h), to submit a two-year report on conservation program achievement.	✓
<b>Docket UE-100170 Order 02 (9) (a) &amp; (b)</b>		
Required Public Involvement in Preparation for the 2012-2013 Biennium.	See “Stakeholder Engagement” section of the Ten-Year Conservation Potential and Biennial Conservation Target report filed in Docket UE-111880 for an outline of the public process the Company facilitated in the development of its proposed 2012-2021 ten year conservation potential forecast and 2012-2013 biennial targets.	✓
<b>Docket UE-100170 Order 02 (10) (a) - (c)</b>		
Cost effectiveness Test is the Total Resource Cost Test.	See Appendices 3 of the Ten-Year Conservation Potential and Biennial Conservation Target reports, “Comparison of Regional Methodologies” filed in Dockets UE-100170 and UE-111880. In addition to resource planning and avoided cost development methodology comparisons these appendices provide information on how the Company’s Total Resource Cost calculation complies with the cost-effectiveness definition (RCW 80.52.030(8)), incorporating the 10 percent conservation benefit and a risk adder consistent with the Council’s approach. Cost effectiveness assessments for the programs in the 2012-2013 business plan as well as three portfolio cost effectiveness assessments are provided in Appendix 7 to the 2012-2021 report. In addition, program and measure specific cost effectiveness calculations were provided with the changes proposed to the Home Energy Savings and FinAnswer Express program. Quantifiable non - energy benefits were included in these calculations. Program and portfolio level cost effectiveness was provided in the 2010 annual report and also included quantifiable non-energy benefits. The 2010 potential study update included the effects of non-energy benefits as a reduction to energy efficiency measure costs.	✓
<b>WAC 480-109-010 (1)(a) and (2)(a)</b>		
(1)(a) Consider only conservation resources that are cost-effective, reliable and feasible.  (2)(a) The biennial conservation target must identify all achievable conservation opportunities.	PacifiCorp relied on 1) its 2007 “Assessment of Long-Term System-Wide Potential for Demand-Side and Other Supplemental Resources” (July 11, 2007), 2) economic screening of the conservation potential identified through the 2008 Integrated Resource Plan (IRP) development, 3) Council’s 6th regional power plan (for measures not considered in the 2007 assessment), and 4) other post IRP adjustments (all documented in Appendix 4 of the PacifiCorp’s ten-year conservation potential and 2010-2011 biennial conservation target report) to establish its ten-year conservation forecast and biennial conservation target.  The commission accepted the company’s forecast and target as meeting the requirements to consider	✓

	all conservation resources that are cost-effective, reliable and feasible by approval of the company's forecast and targets in Docket UE-100170 on July 15, 2010.	
<b>WAC-480-109-010 (1)(b)(i) and (ii)</b>		
Projection must be derived from and reasonably consistent with one of two sources: IRP or current power plan targets.	For the 2010-2019 conservation forecast and 2010-2011 biennium target the company elected to use its 2008 IRP as the base source for its conservation projection. This election is describe in detail in "PacifiCorp's Ten-Year Conservation Potential and 2010-2011 Biennial Conservation Target for its Washington Service Area" filed in Docket UE-100170.	✓
<b>WAC-480-109-010 (2)(a) and (b)</b>		
(2)(a) The biennial conservation target must identify all achievable conservation opportunities. (2)(b) The biennial conservation target must be no lower than a pro rata share of the utility's ten-year cumulative achievable conservation potential. Each utility must fully document how it prorated its ten-year cumulative conservation potential to determine the minimum level for its biennial conservation target.	See response to WAC 480-109-010 (1)(a) and (2)(a) above in this table.  The manner by which the company arrived at its 2010-11 biennial conservation target is explained on page 34 of "PacifiCorp's Ten-Year Conservation Potential and 2010-2011 Biennial Conservation Target for its Washington Service Area" filed in Docket UE-100170.	✓

# Appendix 3

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PacifiCorp Measure Installation Verifications

Pacific Power

# **PacifiCorp Measure Installation Verifications**

## **Low Income Weatherization**

All projects

- All measures are qualified through US DOE approved audit tool.
- 100% inspection by agency inspector of all homes treated reconciling work completed and quality (corrective action includes measure verification) prior to invoicing company.
- State inspector follows with random inspections.
- Company hires independent inspector to inspect between 5%-10% of homes as well (post treatment and payment).

## **Home Energy Savings**

Site Inspections by Program Administrator staff for the following retrofit measures ( $\geq 5\%$ )

- Insulation
- Windows
- CAC/HP Installs and Tune ups
- Duct Sealing

Site inspections by Program Administrator staff of all new homes measures (100%)

- Insulation
- Windows
- CAC/HP Best Practice Install, Sizing
- Duct Sealing
- CFLs

No site inspections are conducted for the following measures (unless part of new homes inspection process) however all post purchase incented measures undergo a quality assurance review prior to the issuance of the customer incentive and recording of savings i.e. proof of purchase receipt review, model number/eligible equipment review, and serial numbers are checked to ensure the Company does not double pay for the same measure or double count measure savings.

- Refrigerators
- Dishwasher
- Ceiling fans
- Light fixtures
- Clothes washers
- Water heaters
- Evaporative coolers
- Air conditioners

Other measures

- CFLs – retail channel, manufacturer agreements and program administrator sales record reviews of qualifying equipment. Invoicing and retail pricing is administered by program administrator.

## **Refrigerator Recycling**

Company hires independent inspector to phone survey  $\geq 5\%$  program participants and site inspect  $\geq 5\%$  (minimum review of 10% of program participants) verifying program participation, eligibility of equipment, vendor pick-up procedures are followed (equipment is disabled at site, kits distributed, etc.) and customer experience.

## **FinAnswer Express**

### For trade ally program administrated projects

#### Lighting projects

- 100% pre/post site inspections by 3<sup>rd</sup> party consultant of all projects with incentives over \$X,000
- 5% post site inspections by program administrator of projects with incentives under \$X,000

#### Non-lighting projects

- 100% of applications with an incentive that exceeds \$X,000 (irrigation dairy/farm and compressed air) and \$XX,000 (all others) will be inspected (via site inspection) are made by program administrator.
- A minimum of 5% of remaining non-lighting applications will be inspected in accordance with an agreed upon inspection protocol, either in person or via telephone interview, by program administrator.

### For Company project manager delivered projects (lighting and non-lighting)

#### Lighting and non-lighting

- 100% pre/post installation site inspections by 3<sup>rd</sup> party consulting engineering firms, invoice reconciled to inspection results.

## **Energy FinAnswer**

#### All projects

- 100% pre and/or post site (no pre inspection for new construction) inspections by 3<sup>rd</sup> party engineering consultant, inspection is reconciled with project invoice for energy efficiency retrofit measures provided by customers.
- Most have a commissioning requirement.

## **All Programs**

As part of the third-party program evaluations (two year cycle) process, the company is implementing semi-annual customer surveys to collect evaluation relevant data (cure for memory loss – customers moving and data not be readily available at evaluation time). This will serve as a further check verifying customer participation and measures installed.

Additional record reviews and site inspections (including metering/data logging) is conducted as part of the impact and process evaluations, a final verification of measure installations.