# Appendix 3

NEEA Memorandum of 2012-2013 Final Savings

Pacific Power

# Memorandum



May 21, 2014

TO: Jeff Bumgarner, Director of Demand Side Management, Pacific Power;

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Eli Morris, Program Manager, Pacific Power

CC: Stephanie Rider, Senior Manager, Planning;

Susan Hermenet, Director, Research, Planning & Evaluation

FROM: Kathryn Bae, NEEA Planning Analyst II

SUBJECT: Annual Savings Report for 2012-2013 Savings Targets

This memo finalizes the savings estimates for 2012 and 2013. Pacific Power used a September 2011 savings forecast to estimate the expected savings contribution from NEEA in helping the Company achieve its conservation target. The Company includes savings potential from market transformation activity in its conservation potential assessment, conservation forecasting, and target setting processes. NEEA is the primary vehicle through which these savings are pursued. In order to track progress towards acquiring these savings, NEEA holds the baseline assumptions and the allocation methodology constant from the time the savings forecasts are developed throughout the biennium period they were developed for. This means the change in savings is a function of the adoption of the efficient measure as opposed to an update to the assumptions or allocation methodology. The following sections summarize the updates as they compare to the targets and provide background about the original assumptions and allocation methodology. The attached spreadsheet details savings calculations at the initiative and measure level.

#### Savings Target Summary

NEEA estimates Pacific Power's annual electric energy savings associated with NEEA's initiatives are 1.58 aMW for 2012 and 1.53 aMW for 2013 (Table 1). These savings are not counted as part of Pacific Power's local programs. The results show that Pacific Power is exceeding its "Total Regional Savings less Local Programs" and Net Market Effects targets for 2012 and 2013 combined.



Table 1: 2012-2013 Site-based Savings for Pacific Power Washington

	2012 Savings Estimates				2013 Savings Estimates			
	Net Market Effects		Total Regional Savings Less Local Programs		Net Market Effects		Total Regional Savings Less Local Programs	
	Current Estimate	Sept. 2011 Report (Targets)	Current Estimate	Sept. 2011 Report (Targets)	Current Estimate	Sept. 2011 Report (Targets)	Current Estimate	Sept. 2011 Report (Targets)
Total	0.77	0.50	1.58	1.13	0.55	0.59	1.53	1.03
Residential	0.39	0.16	1.09	0.70	0.25	0.25	0.93	1.05
Commercial	0.30	0.23	0.33	0.28	0.21	0.23	0.27	-
Industrial	0.08	0.10	0.16	0.15	0.09	0.10	0.33	(0.02)

#### Key:

**Total Regional Savings** = savings from the market adoption of a product or behavior since the market transformation initiative start.

**Net Market Effects Savings** = Total Regional savings - Baseline savings - Local Program savings

**Total Regional Savings less Local Programs Savings** = Total Regional Savings- Local Programs Savings<sup>1</sup>

The local program savings come from Pacific Power's responses to a survey NEEA conducted in February 2013 on its 2012 Local Programs, followed by February 2014 on its 2013 Local Programs.

<sup>1</sup> The Local Programs savings was adjusted for the baseline effects. For example, Pacific Power provides the gross incentives for a measure. NEEA removes the share of that gross number that is "baseline" prior to calculating the "net local programs" savings. NEEA has historically performed this calculation because it is assumed that some of the Local Programs initiatives would have occurred naturally.

## Savings Variance Update

#### Variance from April 2014 Preliminary Report

The 2013 Net Market Effects and 2013 Total Regional Savings Less Local Programs decreased by 0.01 aMW from the April 15, 2014 report. The change had to do with finalizing the savings and service territory distribution from the Ductless Heat Pump Initiative.

### Savings Accounting Methodology

NEEA allocates the savings by funder share or service territory. The funder share method takes Pacific Power's funder share and applies that share to the regional savings. The share differs for savings that NEEA attributes to its previous funding cycles (1997-2004 and 2005-2009) and its current funding cycle (2010-2014). Table 3 shows the funder allocations for Pacific Power Washington.

**Table 2: Pacific Power Washington's Funder Share Allocation** 

Funder Share Area	PacifiCorp WA		
Currently Funded Initiatives (2010 – 2014 Business Plan)	3.01%		
Previously Funded Initiatives (Business Plans 1997 – 2009)	2.56%		

NEEA also estimates savings specific to Pacific Power Washington's service territory using 2012 and 2013 data for the following initiatives:

- Efficient Homes
- Televisions
- Ductless Heat Pumps
- General Purpose and Specialty Lighting
- Heat Pump Water Heaters
- Commercial Lighting Solutions

The remainder of the initiatives uses the funder share savings accounting methodology.

#### Frozen Baseline Assumptions

No change has been made to savings rate baselines since the September 2011 report.

#### Other Key Assumptions

All the reports, including the targets, have additional key assumptions. First, NEEA uses Pacific Power's savings rate assumptions for general purpose and specialty lighting CFLs (Residential Lighting) for the purposes of counting savings contributions from local (Pacific Power's) program. NEEA utilizes their own savings rate for the purposes of estimating regional savings. The rates are:

- General Purpose Lighting: 20 kWh per bulb counted toward local programs (based on the savings rate that Pacific Power is using) which includes a 36% storage factor. NEEA will estimate regional savings from General Purpose Lighting at 24 kWh per bulb.
- Specialty Lighting: 24 kWh per bulb counted toward local programs (based on the savings rate that Pacific Power is using) which includes a 20% storage factor. NEEA will estimate regional savings from Specialty Lighting at 35 kWh per bulb.

Second, NEEA removes savings from initiatives that are not compatible with the product specifications by Pacific Power. These include savings from clothes washers less efficient than MEF 2.0 and Windows with a u-value greater than or equal to 0.35.

# Memorandum

April 30, 2014

TO: Jeff Bumgarner, Director of Demand Side Management, Pacific Power;

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Eli Morris, Program Manager, Pacific Power

CC: Stephanie Rider, Senior Manager, Planning;

Susan Hermenet, Director, Research, Planning & Evaluation

FROM: Kathryn Bae, NEEA Planning Analyst II

SUBJECT: Comparison of 2013 General Purpose CFL Savings to September 2011 Forecast

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This memo provides an estimate of energy usage increase in the residential lighting market in 2013, from a September 2011 forecast of expected baseline savings of 2013 General Purpose Compact Fluorescent Light (CFL) bulb sales to actual 2013 CFL bulb sales. Note NEEA has provided Pacific Power a zero savings estimate in the 2013 Annual Report due to too much volatility in the market, and as a result, the actual unit sales is below the baseline sales expectation to effectively measure any savings gains. NEEA will conduct evaluation in 2014 to further investigate the phenomena.

In the September 2011 forecast, Pacific Power's share of expected 2013 baseline General Purpose CFL bulb sales was 427,336 bulbs. However, the available sales data as of April 2014<sup>2</sup> indicates that Pacific Power's share of total general purpose CFL bulb sales is 335,679, 27% less than the baseline forecast. Table 1 compares the CFL sales and the resulting difference in energy savings.

Table 1. Comparison of 2013 General Purpose CFL Bulb Sales from Forecast and Energy Savings

2013 Pacific Power WA	CFL Sales	Savings Rate (kWh/Unit)	Energy Savings (aMW)	
Baseline Units (Sept. 2011 Forecast)	427,336	24.0	1.17	
Total Units Sold	335,679	24.0	0.92	
	Difference	0.25		

<sup>1</sup> NEEA estimates Baseline as the savings that would have occurred without NEEA, utility, the Bonneville Power Administration, and the Energy Trust of Oregon's market intervention.

<sup>&</sup>lt;sup>2</sup> 2013 CFL sales data collection is incomplete at this time. The reported estimate is an extrapolated sales for one large retailer and parts of the channel, small hardware. The sales for these two extrapolated data sets represent 19% of the total unit forecast for 2013. NEEA expects to all data by June 2013 and will true-up 2013 savings during the 2014 Annual Report time frame.