

CLARK PUBLIC UTILITIES HOME ENERGY REPORTS PROGRAM



Evaluation Results

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PROGRAM DESCRIPTION



The printed home energy report (HER) provides participant customers within the following information:

- How their recent energy use compares to their past energy use
- Tips on how to reduce energy use
- How their energy use compares to that of neighbors with similar homes

Customers are randomly assigned to a participant group or a control group (randomized controlled trial, or RCT)

- 20,482 treatment group customers
- 20,543 control group customers

Evaluation period: Sept 2012-Aug 2014

EVALUATION OBJECTIVES

Verify Random
Control Trial
Design

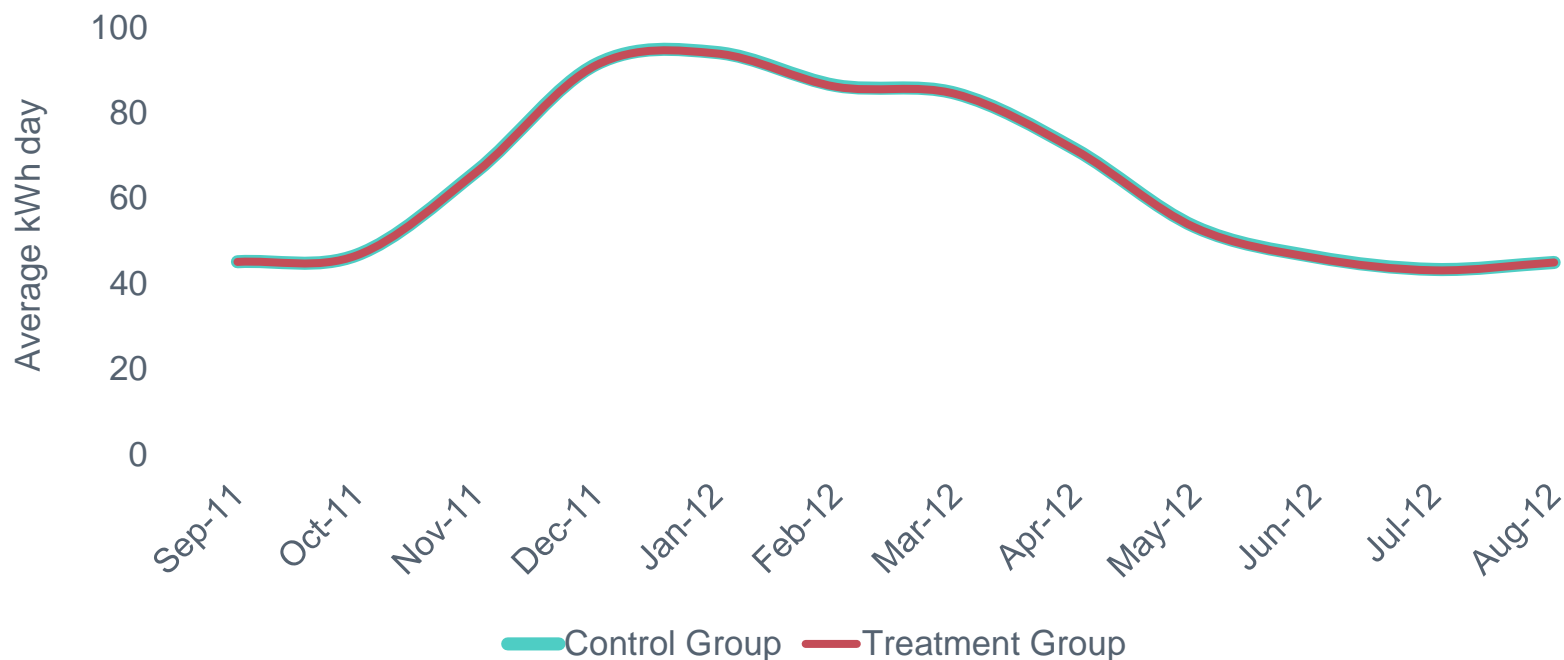
Estimate Joint
Savings

Estimate Program
Impacts
(kWh, %, annually,
average)



The assignment of customers to the treatment and control groups is consistent with a RCT.

Average Daily Energy Use of the 20,000 customers in both Treatment and Control is essentially the same for the 12 Months Prior to HER Program Implementation.

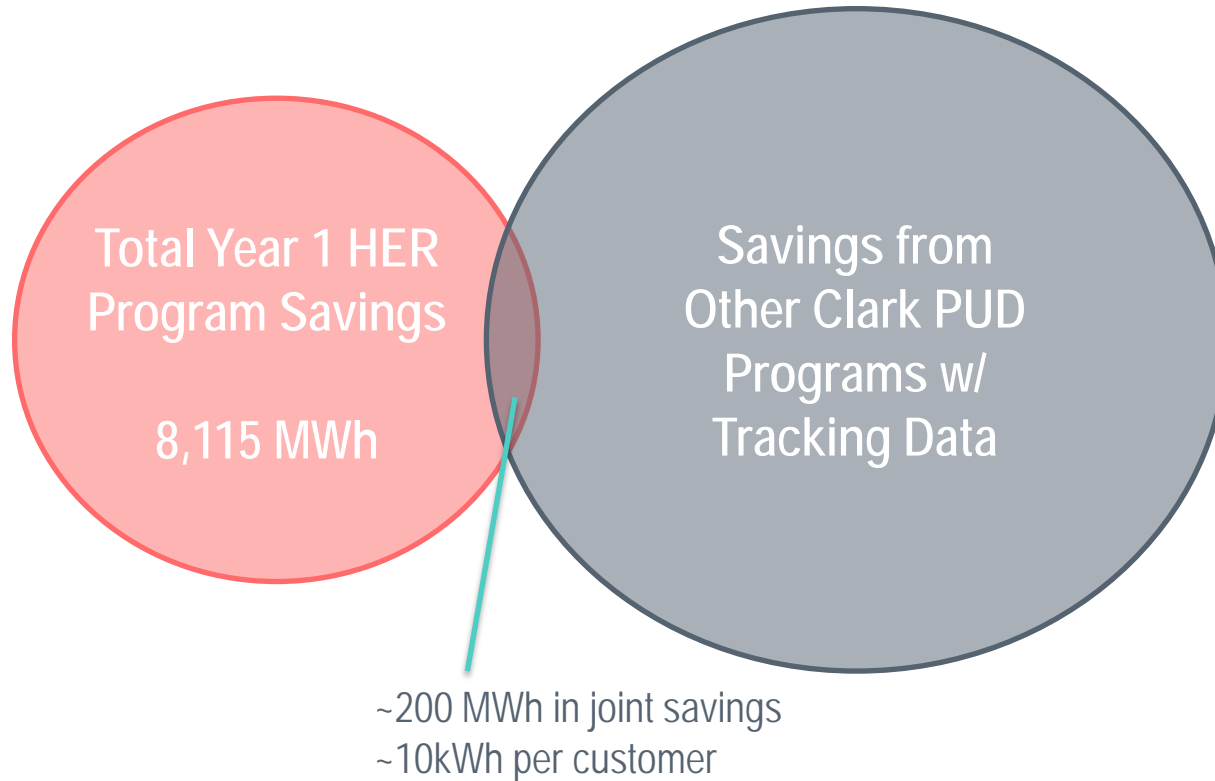


Source: Navigant analysis of treatment and control customer billing data



Evaluation Estimated Joint Savings:

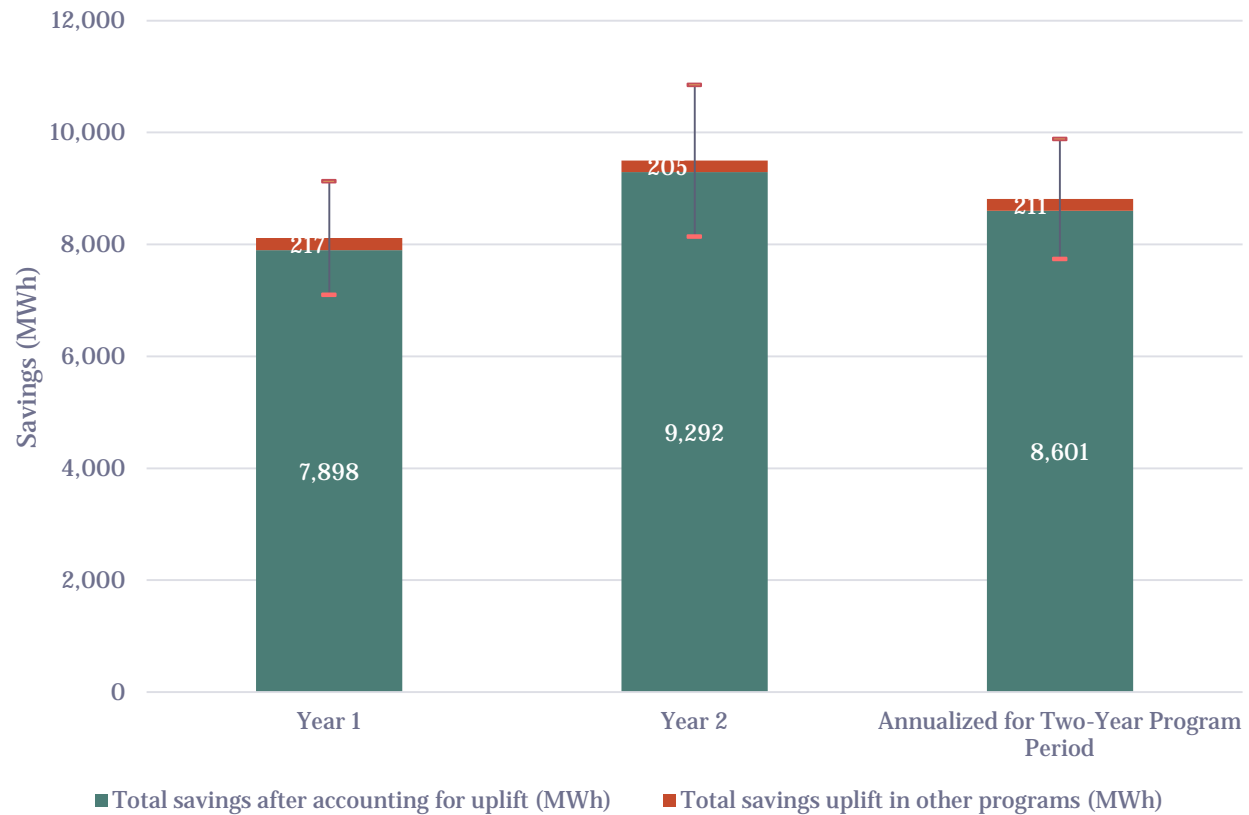
HER program drives customers into other Clark PUD EE programs. These “joint savings” were estimated to avoid double counting.





Total Savings Increase from Year 1 to Year 2

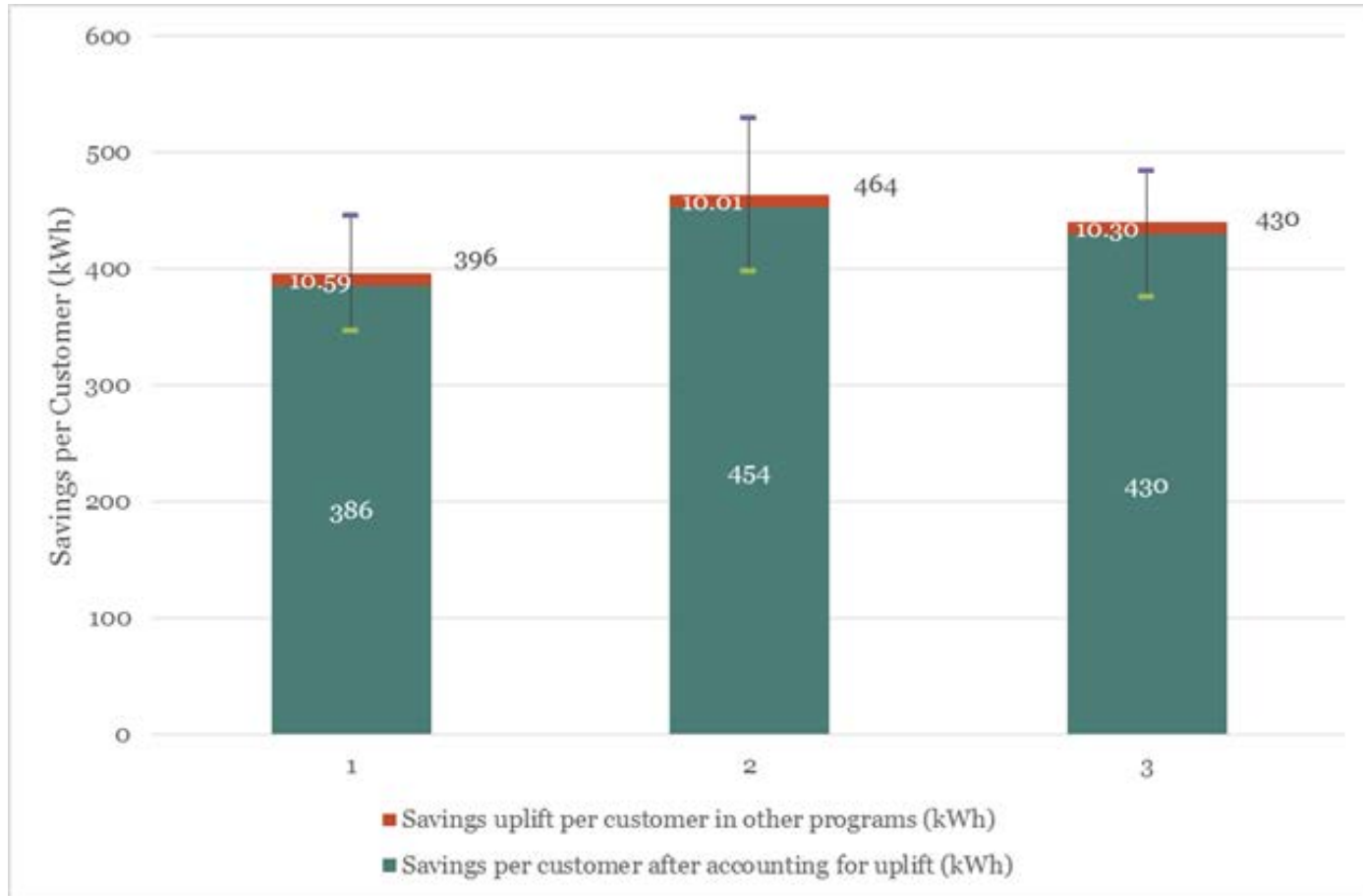
Average program savings are 8,601 MWh for the two-year period



Source: Navigant analysis of treatment and control customer billing data; n= 20,482 treatment and 20,543 control customers

Per Customer Savings

Average savings per customer are 420 kWh (2%) for the two-year period



Source: Navigant analysis of treatment and control customer billing data; n= 20,482 treatment and 20,543 control customers

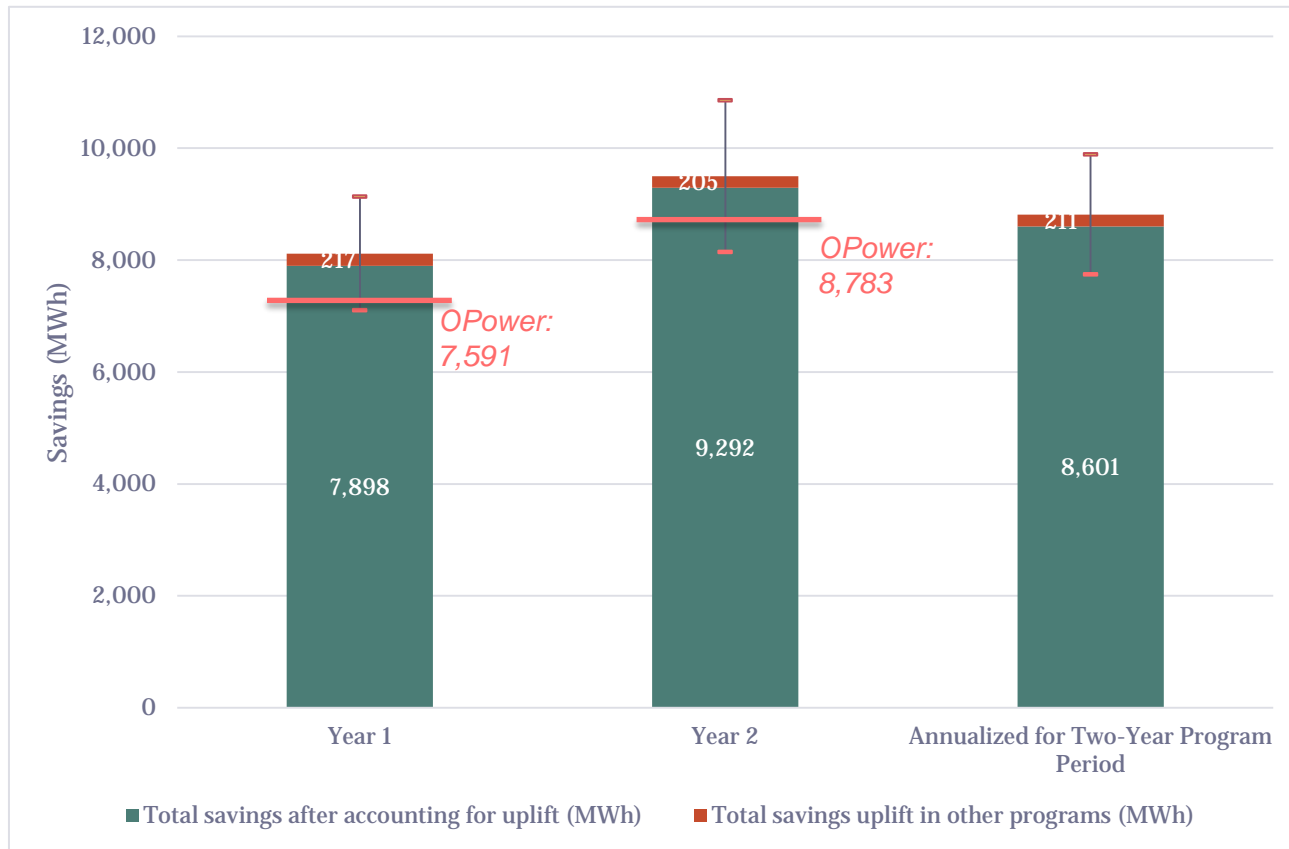
Detailed Findings

	Year 1	Year 2	Total for Two-Year Period	Annualized for Two-Year Period
Number of Participants	20,842			
Number of Control Group Customers	20,543			
Total savings prior to uplift (MWh) <i>(Standard error in parentheses)</i>	8,115 <i>(617)</i>	9,497 <i>(825)</i>	17,623 <i>(1,305)</i>	8,812 <i>(653)</i>
Savings per customer prior to uplift (kWh) <i>(Standard error in parentheses)</i>	396 <i>(30)</i>	464 <i>(40)</i>	860 <i>(65)</i>	430 <i>(33)</i>
Percent savings per customer <i>(Standard error in parentheses)</i>	1.90% <i>(0.14%)</i>	2.23% <i>(0.19%)</i>	2.07% <i>(0.15%)</i>	2.07% <i>(0.15%)</i>
Total savings uplift in other programs (MWh)	217	205	422	211
Total savings after accounting for uplift (MWh)	7,898	9,292	17,201	8,601

Year 1 covers the period September 2012 to August 2013; Year 2 covers the period September 2013-August 2014.
Source: Navigant analysis of treatment and control customer billing data

Evaluation found more savings than Clark PUD by OPower

Difference primarily due to number of participant days



Source: Navigant analysis of treatment and control customer billing data; n= 20,482 treatment and 20,543 control customers

KEY FINDINGS

The assignment of customers to the treatment and control groups is consistent with a RCT.

On average, participants reduced their electricity use by about 2%, after accounting for small uplift.

Evaluation found slightly more savings than estimated by OPower.

RECOMMENDATIONS

1. For future savings of current program participants, Clark should expect savings close to Year 2 results.
2. For future savings of different participants, additional analysis would be needed to understand expected savings.

