

Consumer Behavior Study

Lakeland Electric

Smart Metering Infrastructure Initiative

Abstract

Lakeland Electric's Consumer Behavior Study evaluates customer acceptance and response to a residential time-of-use rate that covers both winter and summer seasons and has on-peak, off-peak, and shoulder periods. The study includes an assessment that compares the response and acceptance participants who elect to sign up for the rate program and those who are placed on the rate program and elect to leave.

Consumer Behavior Study Features

Study objectives include estimating the amount of peak demand savings, load shifting from on-peak to off-peak periods and from shoulder to off-peak periods, and net overall electricity savings. Other objectives include assessing customer acceptance and retention, opt-in and opt-out rates, and drop outs.

Study design comprises a study sample of approximately 2,400 residential customers, a control group involving an additional 600 customers, and a test period that extends from February 2012, after rate approval is received, until May 2014. The study is conducted using a "recruit and delay" randomized control trial design. There are two treatment groups for a single time-of-use rate involving customers who (1) volunteer to "opt-in" and (2) those who are placed on the rate and then decide to "opt-out." In the first year 1,200 customers are recruited into each treatment group with 600 placed on the rate in year one and the other 600 placed on the rate in year two. Participating customers have access to a customer Web portal and the option of receiving "enhanced bills" which will contain details on the timing of their electricity usage. Bill protections cover the first six months of participation in the time-based rate program for each group.

Customer surveys cover pre-program, interim, and post-program periods. The pre-program survey collects baseline information about attitudes, levels of awareness, and customer demographics. The interim survey collects information from opt-in and opt-out groups and identifies differences in attitudes and behaviors. The post-program survey collects information on customer satisfaction and changes in attitudes and behaviors.

At-A-Glance

Recipient: Lakeland Electric

State: Florida

Timing: February 2012 – May 2014

Interim Evaluation Report: May 2013

Final Evaluation Report: Q2 2014

Sample Frame: ~2,400 Residential Customers

Number of Treatments: 2

Experimental Design: "Recruit and Delay" Randomized Control Trial

Rate Treatments

- Time-of-Use (Opt-In)
 - Time-of-Use (Opt-Out)
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Lakeland Electric *(continued)*

Key Milestones

Key Milestones	Target Dates
Lakeland Electric receives rate approval and begins recruitment	December 2011
1 st study evaluation period	February 2012 – January 2013
2 nd study evaluation period	February 2013 – January 2014
Interim Report	May 2013
Final Report	Q2 2014

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