



411 Seventh Avenue  
16<sup>th</sup> Floor  
Pittsburgh, PA 15219

Tel 412-393-1541  
Fax 412-393-1418  
gjack@duqlight.com

**Gary A. Jack**  
Assistant General Counsel

November 30, 2011

**VIA OVERNIGHT MAIL**

Ms. Rosemary Chiavetta, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building, 2<sup>nd</sup> Floor  
400 North Street  
Harrisburg, PA 17120

**Re: Petition of Duquesne Light Company  
For Approval of a Time-of-Use Plan  
Docket No. P-2009-2149807**

Dear Secretary Chiavetta:

Enclosed for filing is the First Progress Report of Duquesne Light Company, containing the information requested by the PUC's Order of June 23, 2010.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'G. Jack', written over a horizontal line.

Gary A. Jack  
Assistant General Counsel

Enclosure

c: All Parties listed on the Certificate of Service

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Duquesne Light Company for :  
Approval of a Time-of-Use Plan : Docket No. P-2009-2149807  
:

**CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of Duquesne Light Company's First Progress Report in the above-referenced proceeding has been served upon the following persons, in the manner indicated, in accordance with the requirements of § 1.54 (relating to service by a participant):

**VIA FIRST-CLASS MAIL AND/OR E-MAIL**

David T. Evrard, Esquire  
Tanya J. McCloskey, Esquire  
Office of Consumer Advocate  
555 Walnut Street  
Harrisburg, PA 17101-1923  
(717) 783-5048  
(717) 783-7152 (fax)  
[devrard@paoca.org](mailto:devrard@paoca.org)  
[tmccloskey@paoca.org](mailto:tmccloskey@paoca.org)

Charles Daniel Shields, Esquire  
Adeolu A. Bakare, Esquire  
Office of Trial Staff  
Pennsylvania Public Utility Commission  
P.O. Box 3265  
Harrisburg, PA 17105-3265  
(717) 787-1976  
(717) 772-2677  
[chshields@state.pa.us](mailto:chshields@state.pa.us)  
[abakare@state.pa.us](mailto:abakare@state.pa.us)

Sharon E. Webb, Esquire  
Office of Small Business Advocate  
1102 Commerce Building  
300 North Second Street  
Harrisburg, PA 17101  
(717) 783-2525  
(717) 783-2831 (fax)  
[swebb@state.pa.us](mailto:swebb@state.pa.us)

  
Gary A. Jack, Esq.  
Duquesne Light Company  
411 Seventh Avenue, 16<sup>th</sup> Floor  
Pittsburgh, PA 15219  
412-393-1541 (phone)/412-393-1418 (fax)  
[gjack@duqlight.com](mailto:gjack@duqlight.com)

Dated: November 30, 2011

**Duquesne Light Company**  
**Time-of-Use and Real Time Pricing Plan**  
**First Progress Report**  
**November 30, 2011**

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

### Executive Summary

Duquesne Light Company's Time-of-Use and Real Time Pricing Plan ("Plan") was approved by the Commission in June 2010. The goal of the Plan is to evaluate customer response to rate options and programs that encourage them to shift or reduce electricity consumption during peak periods of use.

Two residential pilot programs were proposed in the Plan from which customer response could be evaluated. A Time-of-Week program in which approximately 1,000 residential customers would be incentivized to reduce week day consumption and a Time-of-Day program in which approximately 100 residential customers would be encouraged to change behavior through on and off peak pricing.

This report addresses the first two steps of the Plan: to conduct market analysis and implement the infrastructure to support the two pilot programs.

In October 2010, a team was formed, led by the Rates & Tariff Services Department, and including representatives from Media Relations, Customer Care, Billing, Information Technology Office, Smart Meter Project and Meter Operations, and Act 129 Energy Efficiency. This team is the source for program development and has worked with outside consultants in a collaborative effort to achieve Plan goals.

This collaborative process led to the creation of Duquesne's **Smart Sense** pilot program. To implement the program, the team worked together to define objectives and key communication messages; define customer participation criteria; create program materials; install hourly-read meters; and implement process changes. In April 2011, the team successfully enrolled 1341 customers in the Time-of-Week program and 111 customers in the Time-of-Day program. The customers have been actively engaged in the pilot based on their response to surveys and communications. Electric usage data collected from these customers during the months of June 2011 through September 2011 was used to develop the initial program design and will be used as the baseline to measure program success.

Analysis of customer usage data combined with results from on-line web surveys and customer focus groups were key factors in the formation of the final design and pricing of the two Smart Sense pilot programs. Customer preference was clear in wanting programs that are simple in structure, easy to understand and offer meaningful opportunities to reduce energy costs with options that accommodate various levels of risk. Beginning in December 2011, the Company will request participants to complete a free on-line home energy audit in order to receive a variety of complimentary energy saving products and tips to put into use. From June 1, 2012, through September 30, 2012, the Company will evaluate how participants respond to these products and ideas through the following programs to become effective June 1, 2012.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

- Time-of-Week Program: Customers who reduce their June through September 2012 electricity use by 10% or more below their 2011 baseline kilowatt-hour usage will receive an additional 10% incentive credit on the supply charge portion on their bill. As an added incentive, customers who reduce their monthly consumption 10% for all four 2012 months – June 2012 through September 2012 – will receive an additional 10% off of their September 2012 supply charges. Credits to the customer will be provided in the following month's bill.
- Time-of-Day Programs: The Company proposes two pricing options in response to customer input. These two options provide the customer choice depending on their level of risk and perceived opportunity to modify behavior to save. The proposed rates for the two Time-of-Day programs are based on the Company's existing default service rates for residential customers.<sup>1</sup> There is no guarantee of savings to the customer from these two programs.

	Time-of-Day 1	Time-of-Day 2
On-Peak Period	Weekdays 1 p.m. to 6 p.m.	Weekdays 4 p.m. to 6 p.m.
Off-Peak Period	6 p.m. to 1 p.m. weekdays and all weekend hours	6 p.m. to 4 p.m. weekdays and all weekend hours
On-Peak Rate	15.72 cents/kWh	31.44 cents/kWh
Off-Peak Rate	6.13 cents/kWh	5.86 cents/kWh

Beginning in December 2011, the Company will request participants to complete a free on-line home energy audit in order to receive a variety of complimentary energy saving products and tips to put into use. From June 1, 2012, through September 30, 2012, we will evaluate how customers have responded to these products and ideas as well as the design of the proposed pilot programs.

---

<sup>1</sup> Since these are pilot programs, the Time-of-Day rates proposed in Supplement No. XX in Attachment 14 are only available to the 111 eligible participants for a four month period beginning June 1, 2012, through September 30, 2012.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

### Background

Act 129 of 2008 (“Act”) required electric distribution companies (“EDC’s”) with at least 100,000 customers to implement time of use (“TOU”) and real time pricing (“RTP”) plans, among other requirements, and to evaluate these pricing plans as an option for customers to manage their electricity costs. Specifically with respect to TOU and RTP plan that Act states:

2807(f)(5) By January 1, 2010, or at the end of the applicable generation rate cap period, whichever is later, a default service provider shall submit to the commission one or more proposed time-of-use rates and real-time price plans. The commission shall approve or modify the time-of-use rates and real-time price plan within six months of submittal. The default service provider shall offer the time-of-use rates and real-time price plan to all customers that have been provided with smart meter technology under paragraph (2)(iii). Residential or commercial customers may elect to participate in time-of-use rates or real-time pricing. The default service provider shall submit an annual report to the price programs and the efficacy of the programs in affecting energy demand and consumption and the effect on wholesale market prices.

On December 28, 2009, Duquesne Light Company (“Duquesne” or “Company”) submitted its petition for approval of its TOU and RTP Plan (“Plan”). The proposed four-step plan will integrate TOU rates into practice and complement the Company’s Energy Efficiency and Conservation and Demand Response Plans (“EECDR”) as well as the Smart Meter Implementation Plan.

- Step 1 - (2010) Conduct Market Analysis
- Step 2 - (2011) Implement Residential Pilot Program Infrastructure
- Step 3 - (2012) Implement Residential Pilot Programs
- Step 4 - (2013) Implement TOU Pricing Programs to Smart Meter Customers

The Plan proposed three TOU alternatives to evaluate. TOU-1, which will begin in 2012, will be a Time-of-Week plan designed around the limited capabilities of the Company’s existing residential meter infrastructure. TOU-1 will be designed to provide approximately 1,000 residential customers with an incentive to reduce their weekday usage during certain summer months measured against a baseline consumption mark set during those months in the previous year.

TOU-2, which will also begin in 2012, will be a summertime weekday plan in which customer’s rate will vary between on-peak and off-peak usage. It will be designed to encourage approximately 100 residential customers to shift their summer weekday usage from on-peak to off-peak hours. Due to limitations of the current metering and billing system, new meters will be installed on these customer’s homes capable of collecting and storing hourly usage data.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

TOU-3 entails a more comprehensive plan that is proposed to coincide with the initial deployment of smart meters. The parameters of TOU-3 would be based on information learned from TOU-1 and TOU-2, as well as from market research, experience from other programs and rate offerings in Pennsylvania and various other factors. TOU-3 would be offered to all customers with smart meters installed in 2013 (estimated at 5,000 to 8,000), and participation would be strictly voluntary.

On June 23, 2010, at Docket No. P-2009-2149807, the Pennsylvania Public Utility Commission (“Commission”) approved the Company’s Plan, requiring among other items, supplemental filings in accordance with the following schedule.

- By September 30, 2011, Duquesne shall file information to include, but not be limited to, the following:
  - Description and design of its first two pilot programs, TOU-1 and TOU-2, along with all supporting research and market data. [The description and design are addressed in Pages No. 6-7 of this Report and the supporting research and market data are addressed in Pages No. 16-29.]
  - Proposed customer availability for TOU-1 and TOU-2. [Addressed on Pages No. 7-8 of this Report.]
  - Proposed rate design for TOU-1 and TOU-2. [Addressed on Pages No. 28-32 of this Report.]
  - Proposed tariffs incorporating TOU-1 and TOU-2. [Addressed in Attachment 14 of this Report.]
  - Proposed customer educational materials relating to TOU-1 and TOU-2. [Addressed in Pages No. 8-9, and No. 16 of this Report.]
  
- By September 30, 2012, Duquesne shall file information to include, but not be limited to, the following:
  - Summary of the results of its first two pilot programs, TOU-1 and TOU-2.
  - Description and design of its third pilot program, TOU-3, along with all supporting research and market data.
  - Proposed customer availability for TOU-3.
  - Proposed rate design for TOU-3.
  - Proposed tariffs incorporating TOU-3.
  - Proposed customer educational materials relating to TOU-3.
  
- By September 30, 2013, Duquesne shall file information to include, but not be limited to, the following:
  - Summary of the results of all three of its pilot programs, TOU-1, TOU-2, and TOU-3.
  - Description and design of its full TOU program, including proposed TOU rates available to all customers with smart meters, along with all supporting research and market data.
  - Proposed tariffs incorporating all applicable TOU rates.
  - Proposed customer educational materials relating to its full TOU program.

# **Duquesne Light Company Time-of-Use and Real Time Pricing Plan**

## **First Progress Report – November 30, 2011**

---

On August 2, 2011, recognizing detailed data necessary to support its first supplemental filing would not be available until after September 30, 2011, the Company submitted a petition to the Commission to extend the filing date of all supplement filings to November 30 each year. This extension would allow the Company more time to collect and analyze data during the key months of June to September of each year. On September 27, 2011, the Commission approved the Company's request to submit the supplemental reports by November 30 each year.

The report contained herein is the first supplemental filing due November 30, 2011. Attachment 1 is a high level summary identifying key tasks in the scope and schedule of the Plan. The report is organized to describe the key tasks in Attachment 1. A detailed timeline identifying activities and deliverables associated with key tasks is provided in Attachment 2.

### **Project Team**

In October 2010, a team was formed, led by the Rates & Tariff Services Department, and including representatives from Media Relations, Customer Care, Billing, Information Technology Office (Systems and Web), Smart Meter Project and Meter Operations, and Act 129 Energy Efficiency. A total of 14 employees throughout the Company participated on the team. The team met on a bi-monthly basis through the first quarter of 2011 after which smaller sub-teams met to implement specific aspects of the pilot program.

### **Pilot Objectives**

Act 129 established opportunities to reduce electricity requirements in the Commonwealth of Pennsylvania. In addition to TOU and RTP rate options, Act 129 established energy efficiency and demand reduction targets; criteria for implementation of smart meter technology for all customers in the Commonwealth and guidelines for default service supply. The results of these initiatives should not only reduce electricity consumption and electricity demand, but, in theory, reduce the cost of electricity supplied to the consumer. The key to success for these initiatives is the consumer. TOU and RTP products must be embraced by the consumer; therefore, input from the customer is essential as the programs are designed and implemented. In aggregate, each initiative must complement each other, and careful evaluation is needed to ensure an aspect of one plan does not compromise another. Therefore, the pilot program design contained in this report relies heavily on customer input and uses empirical data to ensure Company objectives are achieved.

The Company established the following guiding principles within the Plan to follow as it assessed the expected benefits of each party:



# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

### Guiding Principles

- On- and off-peak hours must align with peak hours of Company load.
- On- and off-peak hours should be practical to the consumer.
- Implementation of TOU rates should align with the Company's EEC&DR Plan.
- Implementation of TOU rates should complement the Company's Smart Meter Plan.
- Default service provisions must be considered in establishing TOU rates.
- Consumer education and feedback is essential.
- Consumers must take action to reduce their monthly bill.
- Participation in a TOU or RTP product should be voluntary.
- Pricing should be simple to understand and communicated in a simple-to-understand message.
- A meaningful price signal should be offered to affect behavioral change.
- Tariff structure and pricing should create opportunities for meaningful reductions in the customers' monthly bill.
- Rate design should result in overall revenue neutrality.

### **Pilot Design**

As described in the Background section above, and in the project schedule in Attachment 1, the primary goal of the first phase of the pilot programs in June 2011 to September 2011 was to enroll customers, collect their baseline data and evaluate customer response to the preliminary design of the programs. The Company would then refine the program in the initial Plan filing to align with customer preferences. The only action needed by the customer during this first phase of the pilot was to respond to periodic on-line or telephone surveys and — for some participants — focus groups. The structures and pricing of these programs will be refined based on customer market research and analysis of baseline data during the first phase of these pilots in 2011.

The following describes the fundamental program design for the pilot programs that will be tested with customers, both in research and in response.

**Time-of-Week Pilot Program (TOU-1):** This pilot will evaluate the customers' ability to reduce their electricity use on weekdays during the summer of 2012. During the months of June through September 2011, the Company collected baseline electricity use data. After the baseline period ends (September 30, 2011), we will provide a variety of free energy-saving products and tips for them to put into use. In the summer of 2012, we will evaluate how they have responded to these free products and ideas. As an added incentive, customers who reduce 2012 electricity use by a pre-determined percent (e.g. 10%) below their 2011 baseline kilowatt-hour usage during select summer months will receive an additional incentive credit on the supply charge portion of their bill for those months. For example, if the customer reduces their 2012 electricity usage by at least 10 percent (10%) in any or all of those months, not only will they save money by reducing their usage, we will credit them for doing so.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

**Time-of-Day Pilot Program (TOU-2)**: This pilot will evaluate customer response to electricity supply rates that are based on the time-of-day and day-of-week. Like the Time-of-Week pilot program, we'll be collecting baseline electricity usage data during the summer of 2011 and will send participants free energy-saving products and tips later this fall. In the summer of 2012, we'll evaluate how they respond to electric supply rates that are designed based on the time-of-day, benefitting those who shift their usage from peak periods to non-peak periods. For example, we may offer a higher supply rate from 2 p.m. to 6 p.m. on weekdays, the peak period of energy usage, and a lower supply rate for all other weekday hours and on weekends. Customers must actively participate and be willing and able to shift their peak weekday usage in 2012 to potentially benefit from this pricing program. In the initial design, there is no guarantee of savings on the customer's electric bill as part of this program.

### **Eligibility**

The Company has approximately 501,600 residential customers on Rate Schedule RS – Residential Service, 29,700 customers on Rate Schedule RH – Residential Service Heating, and approximately 3,860 customers on Rate Schedule RA – Residential Service Add-On Heat Pump. The team agreed that certain eligibility criteria were needed to have meaningful results for evaluation and developed the following eligibility criteria solely for the purpose of this pilot program:

- **Rate Schedules** - The team agreed that the program should only be open to residential customers.
- **Customer Base** - Since the program was designed for customers to conserve energy, the team agreed that it should be open to default service customers so as not to affect any alternative electric generation supplier's sales.
- **Customer Usage Requirements** - The team agreed that in order to obtain meaningful kWh usage data, the customers solicited should have used at least 750 kWh in the months of June, July or August 2010.
- **Customer Dwelling** - The team agreed that the dwelling should be owned by the customer and that service must be in the applying person's name. In addition, it was agreed that the dwelling should be a single family home, patio home, condominium or townhouse.
- **Permanent Devices** - The team agreed that it was required that the dwelling contain a permanent central air conditioner unit or heat pump.
- **Payment Assistance** - The team agreed that payment assistance customers were eligible to participate in the pilot program.
- **Employees** - The team agreed that employees of Duquesne Light Company would be eligible to participate in the pilot program.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

- Communication – as described below, pilot participants would be required to have a computer and email address to participate.

Using the above requirements, the Technology Office queried Duquesne's customer information system and produced a list of 160,000 eligible customers from which to choose.

### **Budget**

The team formed a budget based on expected customer participation and external resources required to prepare program materials and conduct market research. Based on a review of other utility programs, the team recognized one or more incentives would be required to help ensure customer interest to enroll in the program. The team engaged the services of Z-Brand in Pittsburgh to help create enrollment materials. The team also engaged the services of Market Strategies International ("MSI") headquartered in Livonia, Michigan, to conduct customer research through on-line surveys and focus groups.

Attachment 3 is the general budget formed by the team which will be refined as these programs evolve. No costs for this program are recovered through distribution rates in compliance with the Commission's order (Order, June 23, 2010, page 13).

### **Communications**

Pilot communications were intended to attract, educate and motivate program participants while also beginning the process of providing related time-of-use information to the general residential customer population. Attachment 4 summarizes the overall communication and research plan.

Initial steps defined key message points and identified customer communication channels.

The team agreed to the following messages for the TOU Plan:

- Volunteer to help us form the future.
- Help us develop a smart-meter system with TOU rates that will benefit all customers.
- Participants will have the potential to save money by shifting their energy use away from higher cost, on-peak hours to lower cost, off-peak hours.
- Doing this will ultimately help utilities and energy suppliers to pass on cost savings from these efforts to customers.

As detailed below, an invitation letter and a related pamphlet, building on these core messages as well as noting an appreciation payment for participation, were mailed to the target group of customers.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

Attachment 5 is the Company's *ServiceLine* newsletter. The general customer population has been receiving information on smart meters/TOU through articles in the newsletter, which is mailed monthly along with customer bills. This initial step was completed prior to soliciting and enrolling customers. As the Company approaches wider roll-out of smart meters in 2013, additional information will be provided on the Company's website for the general customer population.

### Develop Enrollment Material

The first step in creating enrollment material was to establish a pilot program name. This was considered important for the long term success of the pilot through 2013 and to serve as a brand for customer reference as products were offered. The team brainstormed and assembled over 20 ideas, shortened this list to five, from which an outside firm, Z-Brand, researched availability of these names. This collaborative process led to the creation of "**Smart Sense**" as the name chosen for the Company's TOU pilot programs.

The team created the design, format and materials for the Smart Sense program through a collaborative effort working with Z-Brand. The documents listed below and provided in Attachment 6 are the materials containing the key messages from the communication plan used to solicit customers to participate in the Smart Sense program.

1. Invitation Letter
2. Brochure
3. Privacy Policy
4. "What you will need to sign-up."
5. Customer Participation Agreement
6. Pilot Program Descriptions
7. FAQs
8. Screening Criteria
9. Demographic Survey

A two-part incentive with a combined value of \$120 was developed to entice customers to participate. The team determined the amount of the incentive based on market research and what the team members themselves considered worthwhile if they were solicited to participate in such a program. The first level is a \$20 incentive issued once the demographic survey was completed. The second level is a \$100 incentive to encourage participants to actively take part in surveys, focus groups, and to remain in the program for the full 18 months of the Smart Sense pilot. The participation incentives are in the form of debit cards mailed to the customer upon task completion (e.g. demographic survey complete).

The team developed participant screening criteria to maintain consistency in regard to pilot program solicitation and participation. The team developed the demographic survey to capture the diversity/commonality of the participants and to allow further analysis of sub-groups of those participants.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

### Identify and Implement Process Changes

The Company's current website enables customers to view daily usage information through a simple enrollment process. Daily electricity usage information is available through the existing meter reading system. The team recognized enhancements would be needed to the existing website in anticipation of future communication needs and hourly data information requirements for the Time-of-Day pilot customers. Finally, recognizing that some customers would want to contact the Company via telephone, the team trained select Customer Service Representatives to address inquiries.

**Smart Sense Web System Creation** - The Smart Sense web system development consisted of a number of components that are utilized by both participants and Duquesne Light employees who are administrators of the program. The design was based on the look and feel of another Duquesne Light program website, [www.wattchoices.com](http://www.wattchoices.com), and new design elements were added as the site development progressed.

**Customer Website** – The main component of the Smart Sense web system is the participant website, located at <http://www.duquesnelight.com/smartsense>. It was originally created as the interface for customer enrollment into the program. An on-line form and process was created to allow the customer to provide required information to the Company in order to request admission into the Smart Sense pilot program. Once a request was made by the customer, a message would be displayed on their home page letting the customer know their status (if they had been accepted, rejected, or were still under review). Only “accepted” participants were given access to the website. All customer data was stored in a database that would be referenced and displayed on an internal administrator website.

**Program Administration** - Once the enrollment period was over, new features were added to the customer website, such as a “What We Need from You” dashboard that gave the participant a list of items that were required to be completed, usage data, frequently asked questions, and a “Contact Us” email link. The “What We Need from You” dashboard gives the participant a view of what tasks need to be completed at the current point in time such as “complete demographic survey.” This component references database tables related to a survey application to obtain the necessary data to display to the user.

The usage data differs depending on the type of participant. A Time-of-Day participant will see data on a page showing their daily usage data and a page showing their hourly usage data, while a Time-of-Week participant will only see the daily usage data page. The daily usage page is a direct link to the main [www.duquesnelight.com](http://www.duquesnelight.com)'s meter usage information (Electriweb) page that all customers with an online account can see. The hourly usage page reads the newly implemented MV90 database that captures usage data more frequently than the older system.

The “frequently asked questions” page displays FAQ content to the user.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

The “contact” page provides an HTML form for the participant to send questions and/or comments to the Duquesne Light administrators by sending an e-mail to [smartsense@duqlight.com](mailto:smartsense@duqlight.com).

At all times, the “home page” displays the participant’s current status within the system.

**Survey Application** – A survey was created in order to collect data about the participant at certain points throughout the program. It was created as a sub-application of <http://www.duquesnelight.com/smartsense>, and uses various Smart Sense database tables to read and display survey questions, as well as store survey answers.

**Administrator Website** – The administrator component allows Duquesne Light employees to run reports and analysis on the participant data and act upon the data that is stored in the Smart Sense database tables. The following paragraphs provide a brief description of key functionalities for the Smart Sense Program Administrators:

- The *Participants* tab displays all main participant data, and gives the administrator the ability to sort participants based on status, marketing group, and program option, among other categories. Mass status changes can be executed from this page, and the administrator can drill down into more detailed, participant-specific information.
- The *Surveys and Add Criteria* tabs deal specifically with the survey application. The *Surveys* tab was developed to allow administrators to create surveys and view survey results in graphical form. [The charting displayed for each question was developed using a Coldfusion charting engine. ] The *Add Criteria* tab was developed to allow the administrator to add various survey questions and answers to the *Participants* tab table.
- The *Debit Cards* tab was developed to allow the administrator to process debit card spreadsheets which are then sent to a third party vendor for issuance to the participants.
- A *Validation/Reports* tab was created to run reports on various participants to validate that all participants still meet the criteria to remain in the program. The main use for this tab is to run a process that checks all participants to make sure they are a POLR customer and that they have an active account. If they do not, they are removed from the program and sent an auto-generated e-mail letting them know they have been removed from the pilot program and why and thanking them for their interest.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

**E-Mail System** – The administrator website contains a *Mass E-Mail* tab which was developed to send out branded e-mails to program participants. An administrator can select any number of participants to receive a particular e-mail and add HTML into the e-mail body form. Any time an e-mail is sent, it is also logged in the Smart Sense database for future reference. A history log of all e-mails was added to the Mass Email page. The history log contains a copy of the e-mail as well as who the e-mail was sent to and when.

**Hourly Data Usage Page** - The hourly usage data on the Smart Sense participant website was based off of the daily usage data page in the DuquesneLight.com website. It uses the same temperature data from the Company's billing system ( DiSCus) that the original daily usage data page references. The actual usage data comes from the MV90 database which captures usage data more frequently than the older DiSCus system. The standard consumption meter for the 111 Time-of-Day participants was replaced with an Elster Alpha Power Plus meter. These meters are typically installed on medium/large C&I customers and record 15-minute interval kW in addition to the daily kWh usage we receive from the standard residential meters. MV90 is used to collect, validate and transfer this meter information to the billing system. Interval data is aggregated to the hourly level by MV90 and transferred to a data warehouse called SiMS. The Smart Sense Time-of-Day customer website retrieves information directly from the SiMS data warehouse.

**Smart Sense E-Mail Box** – A dedicated e-mail address and e-mail box ([smartsense@duqlight.com](mailto:smartsense@duqlight.com)) were created for the pilot program. This e-mail box was and is monitored throughout the day by a Customer Care Supervisor who is a Smart Sense team member. When surveyed, the majority of the participants didn't mind having the e-mail address as their main means of contact with the team because those that did send an e-mail were answered in a timely and thorough manner.

**Customer Care Representatives Training** – In March 2011, members of the Smart Sense team trained eight (8) Customer Care Representatives (“CSR’s”) on the Smart Sense pilot program. These CSR’s were specifically chosen because of their subject matter expertise with regard to the Watt Choices energy efficiency program. Items covered in the training consisted of an overview of the Act 129 legislation surrounding the requirement of rolling out smart meters and providing time-of-use and real time pricing plans when installation begins; a review and discussion of the Smart Sense invitation letter and brochure; a first-hand look at the Alpha electronic meter to be installed on the Time-of-Day participants; the Smart Sense web site ([www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)) and e-mail address ([www.smartsense.com](http://www.smartsense.com)); and the differences between the Time-of-Day and Time-of-Week pilot programs. Interested customers were encouraged to e-mail questions to a dedicated Smart Sense e-mail address or to visit the Smart Sense web site. However, the Smart Sense CSR’s were given all of the information in order to be able to answer customer questions on in-coming calls as necessary. Periodic clarifications and answers to customer inquiries were provided as on-going training for the Smart Sense CSR’s. The dedicated Smart Sense e-mail mailbox is continually monitored by a Customer Care Supervisor and responses are e-mailed back to the customer in a timely manner.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

In addition to the detailed training to the Smart Sense CSR's, we provided a general explanation of the pilot to all CSR's so that they were aware of the program. The process is, however, to transfer customers with inquiries to the Smart Sense CSR's.

Attachment 7 contains screen shots from the Company's Smart Sense website.

### Solicitation and Enrollment

Using the eligibility requirements discussed earlier, the technology group queried Duquesne's customer information system and produced a list of 160,000 eligible customers from which to choose. Beginning March 14, 2011, invitations were mailed to 56,000 eligible customers in declining order of electricity consumption. A second mailing was sent late the week of March 21, 2011, to 66,000 customers. Enrollment was held open through April 8, 2011. Two thousand five-hundred fifty-two (2552) potential customers had enrolled in the Smart Sense program over three (3) weeks, after which enrollment was closed.

The additional customers initially enrolled in the program allowed for attrition throughout the effective period of the program. At the time of the mailings and solicitations, one of the challenges was the competitive offers being made by EGSs. Duquesne's fifth default service plan had just become effective January 1, 2011, and would be in effect through May 31, 2013. EGS offers were being made for a two year period. The competing offers against Duquesne's fixed residential rates created turnover in Smart Sense enrollment as shown in Table No. 1. The majority of the 283 customers cancelled from the program switched to an electric generation supplier after enrolling and the 503 rejected customers did not meet the eligibility requirements.

Table No. 2 summarizes the average monthly electricity usage kWh data for the program participants based on June, July or August 2010 usage.

Table No. 1 Smart Sense Program Enrollment Statistics

Initial Customer Enrollment	Number of Customers
Interested Customers	2,557
Alternates	319
Cancelled	238
Rejected	503
Withdrawn/Cancelled after Debit Card Processed	45
Total Active Participants	1,452



# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

Table No. 2 Smart Sense Program Participant Electricity Usage Statistics

kWh Usage	Number of Customers
≥ 750, < 1000 kWh	57
≥ 1000 kWh	1,395
Total Active Participants	1,452

### Pilot Program Options

Since the Smart Sense program had two options, further communication was needed with the customer to obtain their desired preference in the programs. On April 20, 2011, an e-mail was sent out to the 1,452 Smart Sense participants directing them to the Smart Sense website and asking them to log-in and select a TOU program preference (Time-of-Day / Time-of-Week / No Preference). A detailed description of each program was provided in order for them to make an informed choice.

Of the 1,452 enrollees, 580 customers responded with a selection. Eight Hundred Seventy-Two did not respond. Those that did not respond were automatically placed in the Time-of-Week program.

Of the 580 enrollees that did respond, 132 requested the Time-of-Day program, 302 requested the Time-of-Week program and 148 had no preference to a program.

To date, the Smart Sense pilot program has 1,452 participants enrolled. There are 57 customers who used ≥ 750 kWh each month in June, July or August 2010. All of these customers chose the Time-of-Week pilot. There are 1,395 customers who used ≥ 1,000 kWh each month in June, July or August 2010. Out of this customer group, 1,284 are enrolled in the Time-of-Week pilot and 111 are enrolled in the Time-of-Day pilot. Table No. 3 summarizes participant data by program selection and electricity usage.

Table No. 3 Smart Sense Participants by Program and Electricity Usage

Pilot Program Option	Number of Customers
≥ 750 kWh <1 kWh Time-of-Week Participants	57
≥ 1000 kWh Time-of-Week Participants	1,284
≥ 1000 kWh Time-of-Day Participants	111
Total Active Participants	1,452

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

### Demographics

Participants were obligated to complete a demographic survey to take part in the program and to qualify for their initial \$20 enrollment incentive. This demographic survey provided more detailed data to enable the Company to better understand customer reaction to the program design. Attachment 8 provides a breakdown of the customer demographic statistics for all Smart Sense participants. Attachment 9 provides a breakdown of the customer demographic statistics for the Smart Sense Time-of-Day participants. Attachment 10 provides a breakdown of the customer demographic statistics for the Smart Sense Time-of-Week participants.

### Install Hourly Meters

Duquesne's current meter reading system and infrastructure cannot support TOU rates other than for large C&I customers over 300 kW demand. The 111 customers on the Time-of-Day program required a meter change out to a new meter capable of hourly meter readings and data storage.

Duquesne meter technicians installed an Alpha electronic meter capable of recording and storing energy consumption in hourly intervals on the homes of 111 Smart Sense customers. With the Alpha electronic meter, the twenty-four hourly intervals are electronically transmitted back to Duquesne once per day. The customers received an e-mail from the Smart Sense Team notifying them of the pending installation as well as an e-mail notifying them once the installation was complete. In addition, the meter technician placed a door hanger indicating that the work was complete. The meter installation was non-intrusive and required the same amount of time to change out as a standard meter.

Table No. 4 summarizes the statistics from the meter change-out completed May 20, 2011. Customer participation throughout the service area is fairly represented as reflected through this summary by meter district.

Table No. 4 Meter Change-Out by District for the Time-of-Day Program

Meter District	Meters Changed Out
Central	45
Eastern	42
Western	24
Total	111

# **Duquesne Light Company Time-of-Use and Real Time Pricing Plan**

## **First Progress Report – November 30, 2011**

---

### **Customer Communication**

One of the main priorities of the team was communicating with the Smart Sense participants in a timely and effective manner. The Company's goal was to provide meaningful messages yet balance the frequency of email to keep the customer engaged but to avoid overwhelming the customer with generic messages such that they might lose interest.

In order to facilitate this, e-mails were created and refined by a sub-group of the team prior to solicitation and enrollment. In doing so, it allowed for an automated system to send the appropriate e-mail to the participant immediately after enrollment, letting them know their status (accepted, rejected, further review) in the pilot program. Subject matter e-mails were also created by the sub-group in order to target specific participants and/or all Smart Sense participants. Attachment 11 includes the communications sent to customers since enrollment was complete.

### **Customer Research Objectives**

To provide the perspective of the general population, the Company began to incorporate TOU questions in its regular monthly surveys of residential customers, starting in the fourth quarter of 2010. Through surveys and focus groups of Smart Sense participants, Duquesne will analyze customer motivators and use those findings to derive its TOU rates that will coincide with the full implementation of smart meters and smart meter technology. The findings from the Smart Sense participants will also be compared to findings from the general residential population to develop tools to expand market understanding.

The primary objectives of Smart Sense research is to gather information about participant awareness of energy consumption and conservation; determine reaction to price signals; and help establish effective pricing plans and multiple pricing products prior to full smart meter deployment in Phase 2 of the Smart Meter Implementation Project.

Specifically, the customer research will involve:

- Gathering customer feedback on program design;
- Gathering customer feedback on rate design (e.g., on-peak hours, 12 month vs. summer month pricing);
- Determining the type of information that customers will want to have access to as part of the program; and
- Measuring customer reaction to TOU communication tools (e.g., web, email, call-in).

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

### Web Survey and Discreet Choice Analysis Research

In order for Duquesne to determine the optimal TOU electricity supply rate for the Time-of-Day Pilot Program and electricity usage reduction level for the Time-of-Week Pilot Program, Duquesne employed Market Strategies International (MSI) to conduct a web survey and discreet choice analysis with residential Smart Sense program participants and general residential customers to find out their likelihood to participate in a variety of electricity rate or electricity usage reduction program concepts. In addition, the web survey explored other topics related to knowledge and perceptions of TOU, household energy usage and conservation as well as feedback on interactions with the Smart Sense program.

**MSI Customer Information** - In order for MSI to recruit Duquesne Light customers for the surveys and focus groups, the Company provided, after executing a confidentiality agreement, customer specific information, including phone numbers, e-mail addresses, street address information, etc. The following spreadsheets were created by the Technology Department for MSI:

1. Smart Sense participants containing name, program option, and e-mail address.
2. Smart Sense participants containing name, program option, e-mail address, telephone number, alternate telephone number.
3. General residential Duquesne Light customers containing name, whether they use the E-Bill system, and e-mail address.
4. General residential Duquesne Light customers containing name, e-mail address, telephone number, alternate telephone number, and zip code.

A total of 1,492 web surveys were collected between August 16 and August 29, 2011, with a breakdown of customer participation shown in Table No. 5

Table No. 5 Web Survey Participation Statistics

Customers	Number of Surveys	Number of Program Participants	Participation Rate
Smart Sense Time-of-Day	98	111	88%
Smart Sense Time-of-Week	1,094	1,341	81%
Total Smart Sense Surveys	1,192	1,452	82%
General Residential	300	N/A	N/A
Total Participants	1,492		

Customers were sent an original survey invite and up to two e-mail reminders requesting them to participate in the 15 minute survey.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

Attachment 12 is the research report prepared by MSI for the web survey and discreet choice analysis. Key findings from the report are summarized below. Slide references are made to the slides in Attachment 12.

### **Pricing Concepts**

1. Time-of-Use pricing is considered a more preferred and fair approach compared to current flat rates. (Slide 13)
2. Saving money is the primary motivation for customer interest in Time-of-Use pricing. (Slide 14)
3. In addition to traditional communications through monthly bills and printed brochures, email and web communications also have strong appeal. (Slide 15)
4. Customers prefer Time-of-Day pricing compared to Time-of-Week pricing. (Slides 21 and 23)
5. Customers prefer greater on-to-off peak price differential and greater potential for bill savings. (Slides 21, 26-27)
6. Customers prefer an on-peak period ending at 6 p.m. (Slides 21 and 28)
7. The time of year (summer only vs. year-round) has minimal impact on preference. (Slides 21, 24, 26 and 29)
8. Customers most prefer the Rebate concept (i.e., incentive to conserve below baseline). (Slides 23-25)
9. Time-of-Week pricing is the least preferred concept. (Slides 23 and 30)

### **Energy Behaviors**

1. Most customers understand the need to conserve energy and many consider themselves very knowledgeable about how to conserve. (Slide 32)
2. Saving money is the top motivation for conserving energy. (Slides 33-34)
3. Social reasons (e.g., environmental, energy independence) are secondary motivations to conserving energy. (Slides 33-34)
4. Customers strongly desire a working relationship or “partnership” with DLC as it relates to energy usage and costs. (Slide 36)
5. Many customers know at least a little bit about the programs and services DLC offers to help save energy. (Slide 35)

### **Smart Sense Pilot**

1. The program invitation, program letter, brochure, and content were appealing and reviewed by most customers. (Slides 40-41)
2. Program materials were very useful and easy to understand. (Slide 42)
3. There were very few problems accessing the program website. (Slide 45)
4. Information on the website is very useful and customers are satisfied with the website overall. (Slide 47)

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

### **General**

1. There is general consistency in the findings between pilot participants and the general residential customer group (non-participants).
2. TOU survey results related to overall satisfaction with DLC and other performance measures parallel monthly telephone survey results. (Slides 49-50 and 52)

### **Customer Focus Group Research**

In conjunction with MSI, four focus group sessions were conducted Oct. 4-5, 2011. One session consisted of customers participating in the Smart Sense Time-of-Day pilot, two sessions consisted of customers participating in the Smart Sense Time-of-Week pilot and one session consisted of customers from the general residential population of Duquesne Light Company. Consistent with the web survey, the objectives of the focus group sessions were to explore awareness of pricing, products and technology; understand customer preferences about pricing and program design; and explore customer interest in billing and communication options.

Attachment 13 is the research report prepared by MSI for the customer focus groups. Key findings from the report are summarized as follows. Slide references are made to the slides in Attachment 13.

### **Dynamic Pricing – General** - (Slides 9, 21-25)

1. Customers felt positive to neutral about the general concept of dynamic pricing.
2. Some customers liked the idea of being able to shift behaviors to save money. Others indicated less enthusiasm about programs that involve paying a lot of attention to the details of their energy usage and making major lifestyle changes during on-peak time periods. Each of the focus groups had significant numbers of stay-at-home parents, self-employed and retirees who made this point.
3. Most customers liked the idea of being able to save energy, and how this can help the environment and community by doing the right thing; however, they also indicated that more research and education would be needed before making a decision about participating in the program.

### **Dynamic Pricing – Program Design Preferences** - (Slides 10, 27-49)

Background – Focus group participants were presented with four hypothetical dynamic pricing programs to test their interest in each program's concept.

- A. Time-of-Day plan with the on-peak supply rate 5 times the off-peak supply rate, with an on-peak period of 2PM-7PM June-September.
- B. Time-of-Day plan with the on-peak supply rate 2 times the off-peak supply rate, with an on-peak period of 3PM-7PM June-September.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

- C. Time-of-Week plan with an on-peak supply rate 2 ½ times the weekend supply rate year-round.
  - D. Energy Reduction Rebate Plan wherein the customer is incentivized to reduce weekday consumption below a base line period.
1. A relatively simple Energy Reduction Rebate Plan received the highest positive rating overall among the four plans presented in each of the four focus groups.
    - Participants felt that they could save money by doing things they already do – such as turning off lights when not in use.
    - However, some participants were skeptical about the ‘baseline’ period and if continued rebates would be difficult to achieve after two or more years.
  2. Participants felt that moving energy usage to the weekend would be difficult to manage with busy weekend schedules.
  3. Participants reacted very favorably to a Peak Time Rebate Plan:
    - Participants felt this was the easiest to follow and to put into practice.
    - Most participants liked the added bonus of “doing the right thing to help out” and helping out the environment.
    - Many liked the idea that they would not be penalized if they did not change their behavior.
  4. Participants reacted positively to the high reward option (i.e., 5 times the off-peak rate). At the same time, they feared the downside risk. To mitigate that risk, they were open to a bill protection option.

### **Program Design** - (Slide 12)

1. Customers prefer simplicity and ease of participation.
2. Customers are less enthusiastic about programs that involve paying a lot of attention to the details of their energy usage and making major lifestyle changes during on-peak time periods.
3. While customers like the potential for significant savings, they strongly dislike the risk of higher bills.
4. Customers are reluctant to get involved in programs with high on-peak pricing, even when very low off-peak rates are part of the package.
5. “Doing the right thing” can be an added motivator in leading to higher interest in programs that are easy to participate in and make economic sense.
6. The qualitative findings align with the recent on-line survey results and discrete choice analysis.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

### Billing and Communications

#### TOU Payment Options (Slide 50-53)

1. Three payment options were presented and each participant was asked to select their preference, if they were available: monthly billing, budget billing and pre-paid billing.
2. Most participants chose the payment plan that they are currently on (monthly billing or budget), noting that this type of plan already worked for their household.
3. Customers who chose the Pre-Paid option liked that there was no deposit required – which would benefit low-income households. However, many did not like the concept of having to remember to add money to an account to keep power on.

#### Communication Channels (Slide 55)

1. No single means of communication was identified as the preferred method.
2. Customers suggested communication should include the full range of media and identified several specific preferred channels:
  - Email
  - Direct Mail
  - Text
  - Corporate website
3. While some indicated that bill inserts could be a suggested approach, others said they do not always read these.

#### Understanding Monthly Bill (Slide 56)

1. Nearly all customers were able to recall the dollar amount of their electric bill.
2. Many customers knew there are multiple line items included in the bill but only a small number were able to name specific line items.

#### Smart Meter Implementation (Slide 57)

1. Customers have a curiosity for more information about their energy usage. They are interested in smart meters from the standpoint of being able to track daily and hourly usage, view statistics online and the ability to compare usage over time.
2. Participants feel that having access to this type of information will give customers the ability to have greater control over energy usage.
3. Furthermore, customers are interested in conservation efforts that can ultimately improve the environment.



# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

### General Awareness – Duquesne Light and Smart Meters - (Slides 7-8, 14-15, 18-19)

1. Customers described hearing/seeing information on competitor's energy supply abilities; however, most indicated that figuring out the actual price for switching was complicated.
2. Unaided responses to awareness of communications and Company programs included refrigerator rebate program, Dollar Energy Fund, CAP for energy assistance, and *ServiceLine* newsletter.
3. Customers had a positive reaction to Duquesne Light providing services and programs to customers and to the community.
4. Knowledge of the term "Smart Meter" is highest among the Time-of-Day participants with Time-of-Week participants close behind.
5. Similarly, all Time-of-Day focus group participants and nearly all Time-of-Week group participants indicated being aware of Time-of-Use.
6. Many customers in the General Residential Customer Population session indicated not having heard the term "smart meter" prior to the focus group and they have the least amount of awareness about Time-of-Use pricing.

### **Baseline Electricity Usage Data Collection**

During 2011, the Company collected baseline electricity usage data for the months of June through September for all customers participating in the Smart Sense program. This data is necessary for program design and evaluation of customer response to the programs when they become effective June 1, 2012.

Electricity consumption for the 1341 customers in the Time-of-Week pilot program was collected through the standard residential meters read daily by the Company's automated meter reading infrastructure. These meters measure daily consumption and are not capable of collecting hourly electricity usage. To offer and implement the Time-of-Day pilot program for the 111 customers, it was necessary to replace the customer's standard meter with an Alpha meter to collect hourly electricity usage data. (Also see section "Install Hourly Meters" Page 1.) Therefore, for analysis purposes of Smart Sense pilot program participants, daily data is available for all 1452 participants and hourly data is available for the 111 Time-of-Day participants beginning June 1, 2011.

The Company identified the following findings with respect to system load data on Page 17 in its December 28, 2009, filing:

- A TOU rate should be in place June through August. Although the summer period is typically considered June through September, historic data suggests the peak hours occur during June through August over 95% of the time. Offering a TOU rate during the month of September would not result in a meaningful load reduction in Duquesne's service territory.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

- A Critical Peak Price (“CPP”) could be designed around the latter half of July and the first three weeks of August which is when the peak system load most often occurs.
- A summer TOU rate should reduce the most frequent hour of peak load. Hour ending 17, or between 4 p.m. and 5 p.m., is the hour of most frequent peak load. A TOU rate should be designed around this hour since the peak hour is not known in advance.
- A TOU rate with an on-peak period between 1 p.m. to 7 p.m. (between hour ending 14 and hour ending 19), June through August, should provide a focused and meaningful reduction in peak system load in the Duquesne zone. These are the most frequent hours of system peak load.

An analysis of the baseline electricity usage data for the Smart Sense program participants for the months of June through September 2011 provides insight on program design and is consistent with the findings with regard to the system load described in the 2009 submittal.

Table No. 6 summarizes the average usage per participant per month for each of the Smart Sense Programs. Consistent with analysis in the December 2009 Plan filing, average electricity consumption is high for June through August and decreases in September, reflecting less air conditioning usage in September. In general, there is no material difference between participants in the Time-of-Week or Time-of-Day program with respect to average monthly consumption. However, the high usage suggests there may be opportunities for response to program incentives.

Table No. 6 Average Monthly Consumption (2011) – kWh/Customer/Month

	June	July	August	September
<b>Time-of-Week</b>				
Average	1,164	1,556	1,156	824
Minimum	232	203	212	171
Maximum	3,856	4,912	3,837	2,883
<b>Time-of-Day</b>				
Average	1,458	1,985	1,576	1,128
Minimum	643	962	530	363
Maximum	4,962	6,441	5,740	4,123

Table No. 7 compares the share of weekday and weekend electricity consumption for each of the Smart Sense programs. Weekday usage averages about 71% of consumption and weekend usage averages about 29% of consumption. Table No. 7 demonstrates there is no material difference between customers in the Time-of-Week and Time-of-Day programs with respect to weekday and weekend consumption. In addition, residential participants consume about the same amount of electricity per day on a percentage basis on weekdays as they do on weekends. This suggests

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

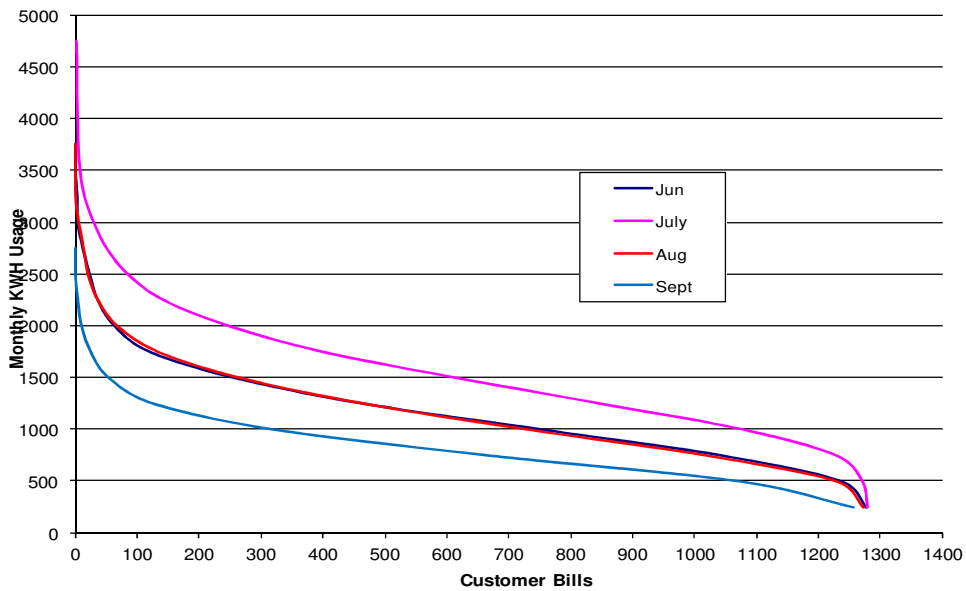
the Time-of-Week program design must consider the opportunity for customers to reduce consumption throughout the entire week rather than only on weekdays.

Table No. 7 Share of Monthly Consumption - Weekday and Weekend (2011)

	June	July	August	September
<b>Time-of-Week</b>				
Weekday	74.1%	66.9%	72.9%	70.3%
Weekend	25.9%	33.1%	27.1%	29.7%
<b>Time-of-Day</b>				
Weekday	73.5%	67.0%	72.5%	69.6%
Weekend	26.5%	33.0%	27.5%	30.4%

Figures No. 1 and 2 are a bill distribution for customers in each program showing the range of electricity consumption each month. Figures No. 1 and 2 demonstrate about 30% (350 of 1342) of the bills for Time-of-Week customers and 30% (35 of 111 bills) of the bills for Time-of-Day customers issued have usage considerably higher than the median average participant in each program. It can be concluded from these graphs that an opportunity exists through either Smart Sense Pilot Program to reduce consumption for participants with extremely high usage.

Figure No. 1 Time-of-Week Participant Bill Distribution

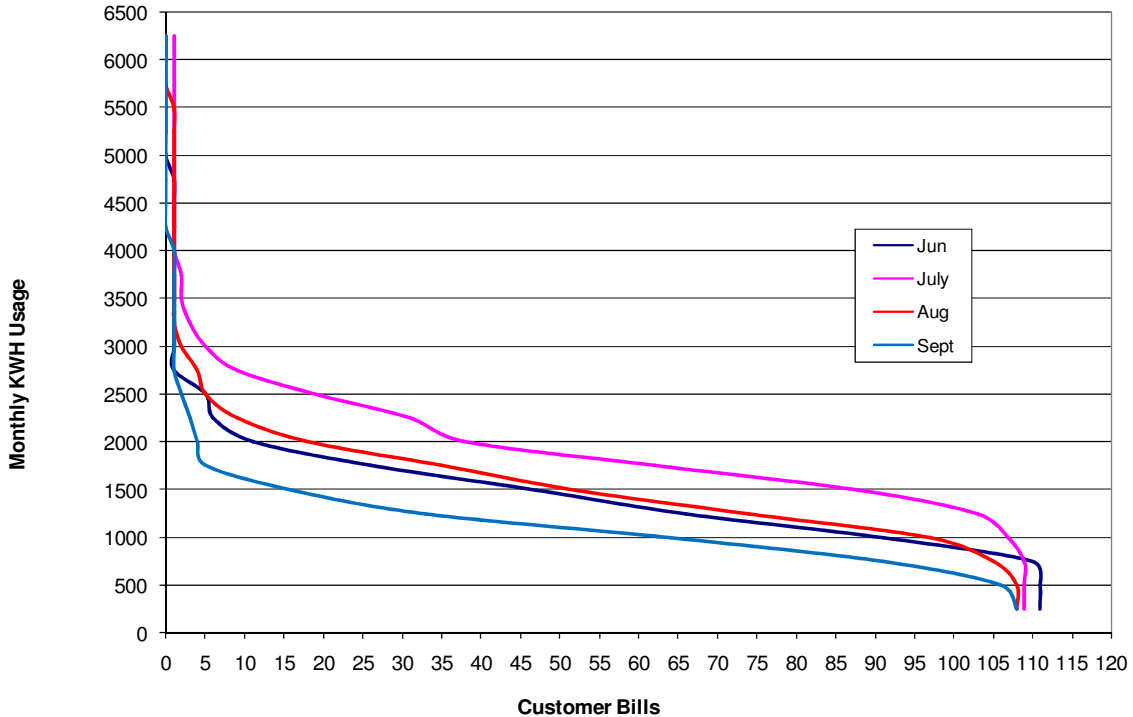


# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

Figure No. 2 Time-of-Day Participant Bill Distribution



The Company's peak load in 2011 was 3012 MW and occurred on Thursday, July 21, 2011, hour ending 1700. The timing of the load is consistent with the conclusions described above. Figure No. 3 shows the hourly usage for the Time-of-Day customers for the week ending July 23, 2011, the week the system peak occurred and the peak load week of the year. Several points are worth noting from Figure No. 3. First, hourly usage patterns for the Smart Sense Time-of-Day participants are consistent with when the peak hour occurred. Second, Friday, July 22, 2011, was forecast to be a higher load day, with the load increasing sooner in the day. An afternoon storm lowered temperatures, flattening the load before it exceeded the July 21, 2011, peak. Third, the weekend load for the Time-of-Day customers remained high and consistent with the weekday load.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

Figure No. 3 Aggregate Profile of Time-of-Day Participants Week Ending July 23, 2011

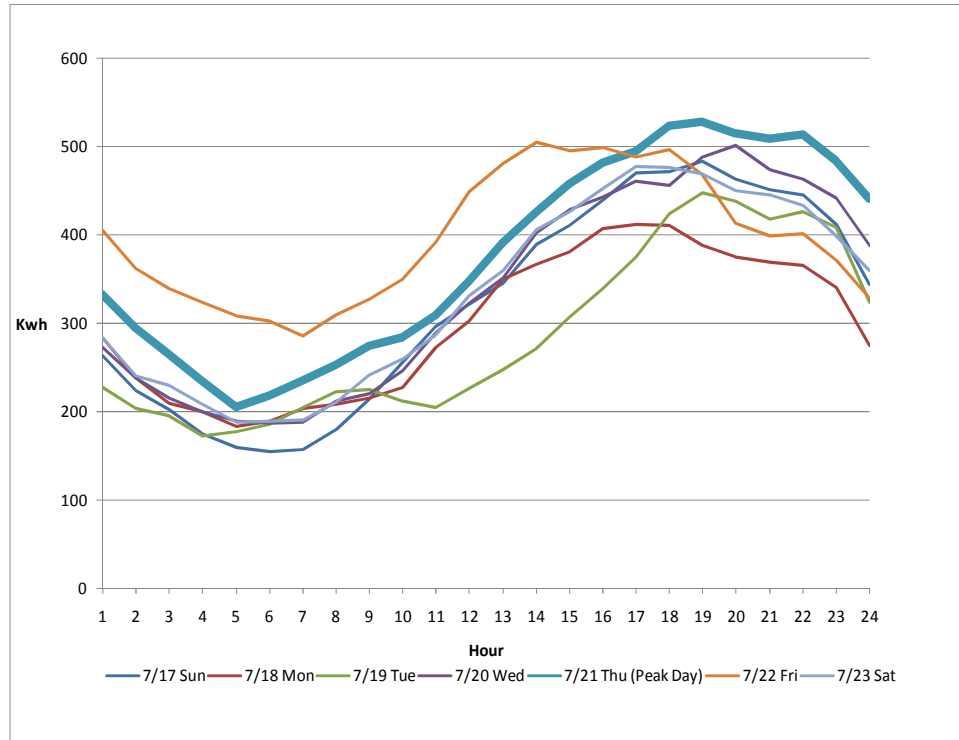


Figure No. 4 compares the Company's system day load profile with the load profile of the aggregate Time-of-Day participants for the peak day of the year. The residential load lags the system load throughout the day, with the residential Time-of-Day peak load occurring after the system peak load. The residential load occurs after the system peak load likely due to customers returning home from work and conducting evening activities. While reducing residential load after 6 p.m. would have had no effect on reducing the system load on this peak day, reducing residential load throughout the day may have had some impact on reducing the system load due to the lag.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

Figure No. 4 Company Load vs. Time-of-Day Load - Peak Day 2011

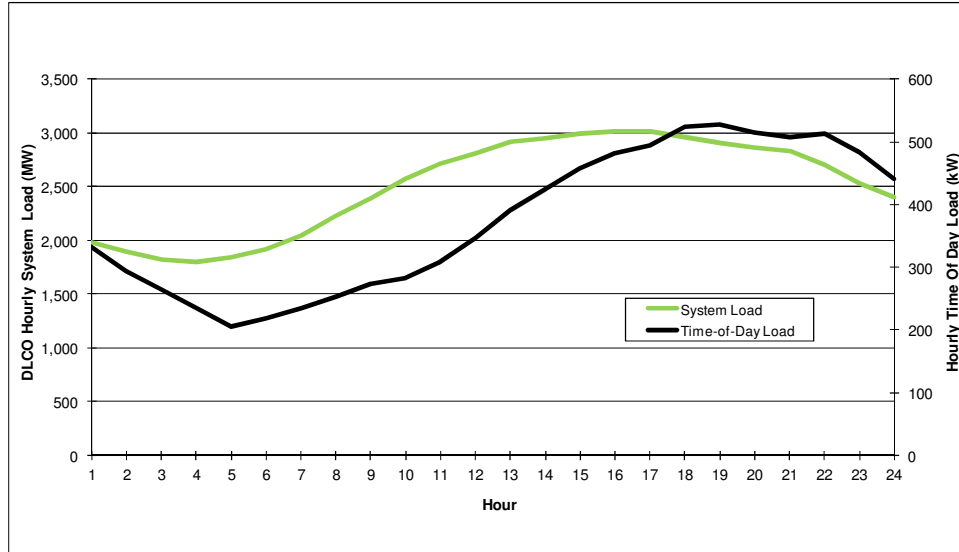


Figure No. 5 Time-of-Day Customer Load versus PJM Locational Marginal Price

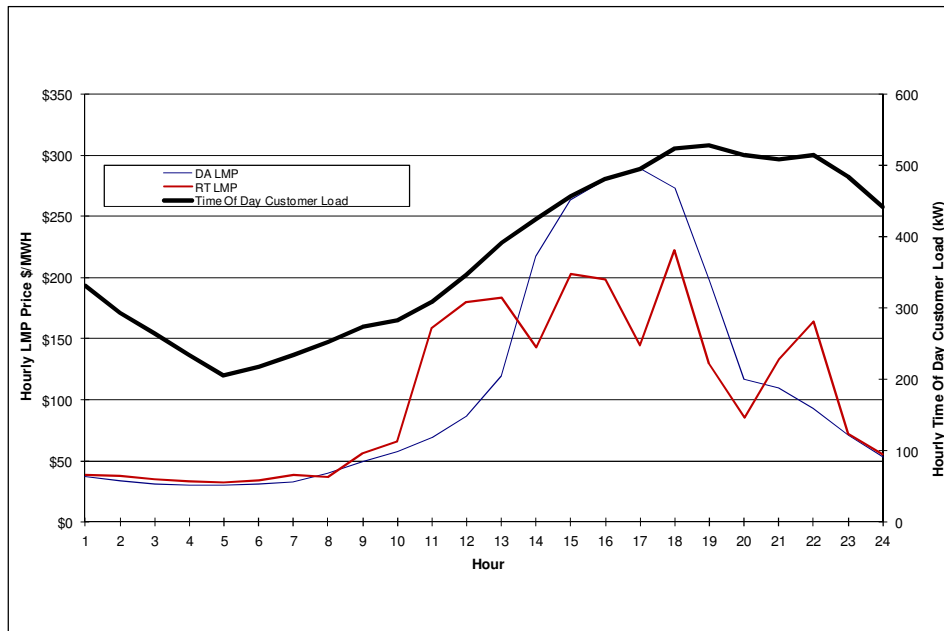


Figure No. 5 shows the Time-of-Day aggregate customer load on the peak day July 21, 2011, versus the day-ahead and real-time locational marginal price (“LMP”) in PJM for that day. Day-ahead LMP is a smooth curve as expected while real-time LMP reflects the effects of demand

# **Duquesne Light Company Time-of-Use and Real Time Pricing Plan**

## **First Progress Report – November 30, 2011**

---

response on that day. Day-ahead LMP price for energy only was \$289/MWh (28.9 cents/kWh) at hour 17, considerably higher than the Company's all-in default service rate of 7.86 cents/kWh. The LMP price quickly declines after that hour both day-ahead and real-time. This figure demonstrates how prices align with the load curve throughout the day, and also the prices customers may have paid if they were on a hourly-based price rate.

The following conclusions can be drawn from an analysis of baseline data in the tables and figures above:

1. Time-of-Week and Time-of-Day participants on average use about the same amount of electricity.
2. Opportunities to reduce or shift electricity consumption should exist for high-use customers (about 30% of participants have above average usage).
3. Participants use about the same amount of electricity per day on weekdays and weekends.
4. The peak hours of the system load and residential load are about the same.
5. A peak period beginning 1 p.m. and ending 6 p.m., as suggested in customer research, aligns with the system load and LMP prices.
6. A time-of-day rate based on pure LMP price may be too high for customer risk tolerance.

### **Proposed Rates and Program Design**

Smart Sense research demonstrated that while many participants believe the concept of dynamic pricing is worthwhile and potentially doable when initially discussed, that enthusiasm generally dimmed when actual pricing and actual on-peak and off-peak time periods were presented and customers more closely evaluated their ability (or lack thereof) to switch power use to off peak hours. Customers were particularly concerned about slight increases in on-peak usage offsetting whatever benefits they realized from switching other usage to off-peak hours. For these reasons, combined with competing objectives described below, the Company believes customer participation in variable price-type programs must be voluntary.

In constructing the proposed Smart Sense program and rate design to become effective June 1, 2012, the Company used the feedback and conclusions from customer research and the electricity consumption data as the basis to ensure the program design aligned with the Company's guiding principles (Page No. 6) and findings (Pages No. 17-22) described above and established in the initial Plan filed in December 2009.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

### Customer Research Findings

The following summarizes common themes from customer research with regard to overall program design:

- Simple – Keep the programs simple and present materials in easy to understand language relative to bottom line consumer benefit(s).
- Options – Some customers prefer a greater opportunity to achieve material savings and are willing to pay considerably higher prices during on-peak periods if there is an opportunity to save during off-peak hours. Conversely, others prefer low risk with only a marginal opportunity to save. Offering options will allow customers to choose to their level of risk.
- No penalty – Some customers felt they should not pay any more than their current bill, believing they should not be penalized for their lack of participation through a higher bill.
- Seasonal program sufficient – Customers did not want a year-round time-of-day rate.

The Company proposes the following program designs to become effective June 1, 2012, with these overarching customer preferences in mind, and based on specific customer preferences and analysis described in each section. Customer response to these programs will be tested with customers, both in research and relative to baseline data collected in 2011.

### Time-of-Week Program Design (1341 customers)

As described in the Company's December 2009 filing (Pages No. 29-30), the primary objective of the Time-of-Week program was to evaluate customer response to reducing weekday consumption, evaluate communications channels and increase awareness of energy consumption, all within the limitations of the existing automated meter reading system. Through research, customers welcomed the opportunity to participate in a program where they may reduce their electric bill. Customers indicated they did not want a weekday/weekend price differential in the program because many of their chores already occurred on the weekend, or they used the weekend to enjoy activities. They liked the idea of participating in a program that did not have a penalty, and some suggested a reward-type program to encourage customers to more actively participate. However, considering actual weekday and weekend consumption per day is about the same, a weekday-only program may be more complex for customers to understand. A program that focuses on total monthly usage reduction versus weekday only usage reduction may achieve the desired goal of weekday usage reduction because of education, awareness and energy saving products that customers are mindful of every day.

The Company proposes a Time-of-Week design similar to that proposed in its December 2009 filing. The Company collected daily electricity use data for each customer from June 1, 2011, through September 30, 2011. This data will serve as the baseline electricity use data. Beginning in December 2011, the Company will request participants to complete a free on-line home energy audit in order to receive a variety of complimentary energy saving products and tips to put into use. From June 1, 2012, through September 30, 2012, the Company will evaluate how each participant has responded to these products and ideas. Monthly kilowatt hour usage data



# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

collected in 2012 will be compared against the equivalent 2011 base line month. As an incentive, participants who reduce their 2012 monthly kilowatt-hour use by 10% or more below their 2011 baseline kilowatt-hour usage will receive an additional 10% incentive credit on the supply charge portion on their bill during the 2012 months. As an added incentive, participants who reduce their monthly consumption by at least 10% for all four 2012 months – June 2012 through September 2012 – will receive an additional 10% off of their September 2012 supply charges. Incentive credits to the customer will be provided in the following month's bill.

The benchmark for receiving the incentive is a 10% reduction. Participants who reduce their 2012 consumption less than 10% will not receive the incentive. Participants who reduce their 2012 monthly consumption more than 10% will only receive the 10% incentive off of their default supply charges. While there is no guarantee of savings, there is no risk to the customer.

As an example, assume a participant used 1,000 kWh during June 2011. Their default service charge would have been \$78.60 for that month (1,000 kWh \* 7.86 cents/kWh residential default service supply rate). Assume the participant uses 850 kWh in June 2012. The reduction would be 15%. The participant's default service charge for June 2012 would be \$66.81 for that month (850 kWh \* 7.86 cents/kWh). The participant would not only have a lower default service supply charge of \$11.79 (\$78.60-\$66.81) due to reduced kWh usage but also would receive an incentive credit of \$6.68 (\$66.81 \* 10%) on their July bill since they reduced consumption by 10% or more.

By taking a broad approach to this incentive, the Company will be able to evaluate whether the reductions occurred on weekdays or weekends. This portion of the Smart Sense pilot will serve as a benchmark to help evaluate future programs that target specific reductions, e.g. weekdays or specific hours of the week. It will also serve as a means to educate customers about electricity usage and to evaluate the effectiveness of energy efficient products and communication messages.

### Time-of-Day Program Design (111 customers)

Design of the Time-of-Day program is more complex than the design of the Time-of-Week program, primarily because of the potential bill impacts that may arise due to the on-peak and off-peak prices. Customer research suggested that the on-peak period should end by 6 p.m. to allow sufficient time for evening activities. In addition, some customers were comfortable with higher pricing if the opportunity for bill reductions was reasonably achievable.

Customers are incentivized to participate in the Smart Sense Pilot Program. Unlike the Time-of-Week Pilot Program, customers participating in the Time-of-Day Pilot Program could experience higher bills if they took no action. Therefore, the Company evaluated rate design options to mitigate significant bill impacts while at the same time balanced many competing objectives described as follows.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

- Engage customers – The Company believes that programs will only be successful if they are designed to meet customer preferences and expectations. Designing rates merely aligned with market pricing that do not align with customer preferences will discourage active participation.
- Reduce system peak load – A primary goal of Time-of-Day rates is to encourage customers to modify behavior during time of peak electricity load. The on-peak hours of the Time-of-Day rate must be aligned with the hours of the Company's peak load in the interest of achieving this goal.
- Diverse demographics – One size does not fit all. A Time-of-Day rate cannot be designed to satisfy all customer preferences particularly with the diversity in the participants as evidenced in Attachments 8, 9 and 10.
- Bill impacts – While all participants voluntarily enrolled in the Time-of-Day pilot, not all customers may achieve the same benefits from rate differentials. Individual bill impacts should be considered along with the bill impact for the whole Time-of-Day group in aggregate.
- Take action to save – On-peak electricity usage is a relatively small portion of the entire month's consumption. For example, an on-peak period from 1:00 PM to 6:00 PM week days represents about 20% of the total monthly consumption for the Time-of-Day participants in aggregate for the months of June through September 2011. A Time-of-Day rate designed without consideration of the on-peak to off-peak ratio of electricity consumption (e.g. on-peak rate is twice the off-peak rate) could result in significant bill reductions for the customer without the customer taking action. This would defeat the goal of reducing the Company's peak load since the customer's behavior would not change.

Given these objectives and customer preferences, the Company established the following parameters for the Time-of-Day rate design:

- On-peak period is 1 p.m. to 6 p.m. weekdays – This aligns with peak system load, allows for meaningful on-peak rate design, and the ending hour aligns with customer preference.
- June 2012 through September 2012 effective period – The December 2009 Plan suggested June, July and August. Extending the Time-of-Day effective period through September not only provides opportunity for shoulder month changes but also aligns with the typical summer season

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

- Bill impact is less than \$5.00 per month for most participants – Since rates cannot be designed specifically for each customer to be purely revenue neutral, \$5.00 per month was selected as a moderate bill impact. Participants in the Time-of-Day pilot consume at least 1,000 kWh per month, which results in a default service charge of \$78.60 per month. Assuming no behavioral modification by the participant, a \$5.00 per month additional cost is a modest change in their bill for rate design purposes.
- Ability to save – On-peak kWh’s are about 20% of the participants’ total monthly consumption. Customers must have the ability to recognize meaningful savings to shift operation of appliances from on-peak to off-peak period. This shift must reflect the pricing differential.

Duquesne’s current residential default service rate is 7.86 cents/kWh (\$78.60/MWh). The Company proposes the following default service rates effective June 1, 2012, through September 30, 2012, for the 111 participants in the Time-of-Day Pilot Program. The Company proposes a Tariff supplement provided as Attachment 14. The proposed supplement reflects the limited nature of the time-of-day rates, for a pilot program, for a short duration (June 1, 2012, through September 30, 2012) to a limited number of participants.

	Time-of-Day 1	Time-of-Day 2
On-Peak Period	Weekdays 1 p.m. to 6 p.m.	Weekdays 4 p.m. to 6 p.m.
Off-Peak Period	6 p.m. to 1 p.m. weekdays and all weekend hours*	6 p.m. to 4 p.m. weekdays and all weekend hours*
On-Peak Rate	15.72 cents/kWh	31.44 cents/kWh
Off-Peak Rate	6.13 cents/kWh	5.86 cents/kWh

\*Independence Day (Wednesday, July 4, 2012) and Labor Day (Monday, September 3, 2012) will be considered off-peak all day.

The on-peak rates are based on two and four times the current default service rate in response to customer comments. The off-peak price is designed to mitigate bill impacts to all participants if they used the same electricity consumption as the 2011 baseline period and took no action to modify behavior.

Once the pricing is approved by the Commission, the Company will communicate the options to the 111 Time-of-Day participants. Participants enrolled in the Time-of-Day program will be requested to choose one of the two options. If no selection is made by May 1, 2012, participants will be placed in the Time-of-Day 1 program option. Unlike the proposed Time-of-Week program, participants could pay more for electricity than they otherwise would under the Company’s basic default service rate.

# Duquesne Light Company Time-of-Use and Real Time Pricing Plan

## First Progress Report – November 30, 2011

---

### Next Steps

The Company limited communication to Smart Sense participants related to energy saving measures to avoid impacting the June through September 2011 baseline data. Education communication will be the primary activity through September 2012, the balance of the Smart Sense pilot program. The Company will provide a variety of free energy-saving products and tips for participants to put into use beginning in December 2011. We will communicate the program design and pricing to customers after Commission direction on the proposed programs and rates in this report.

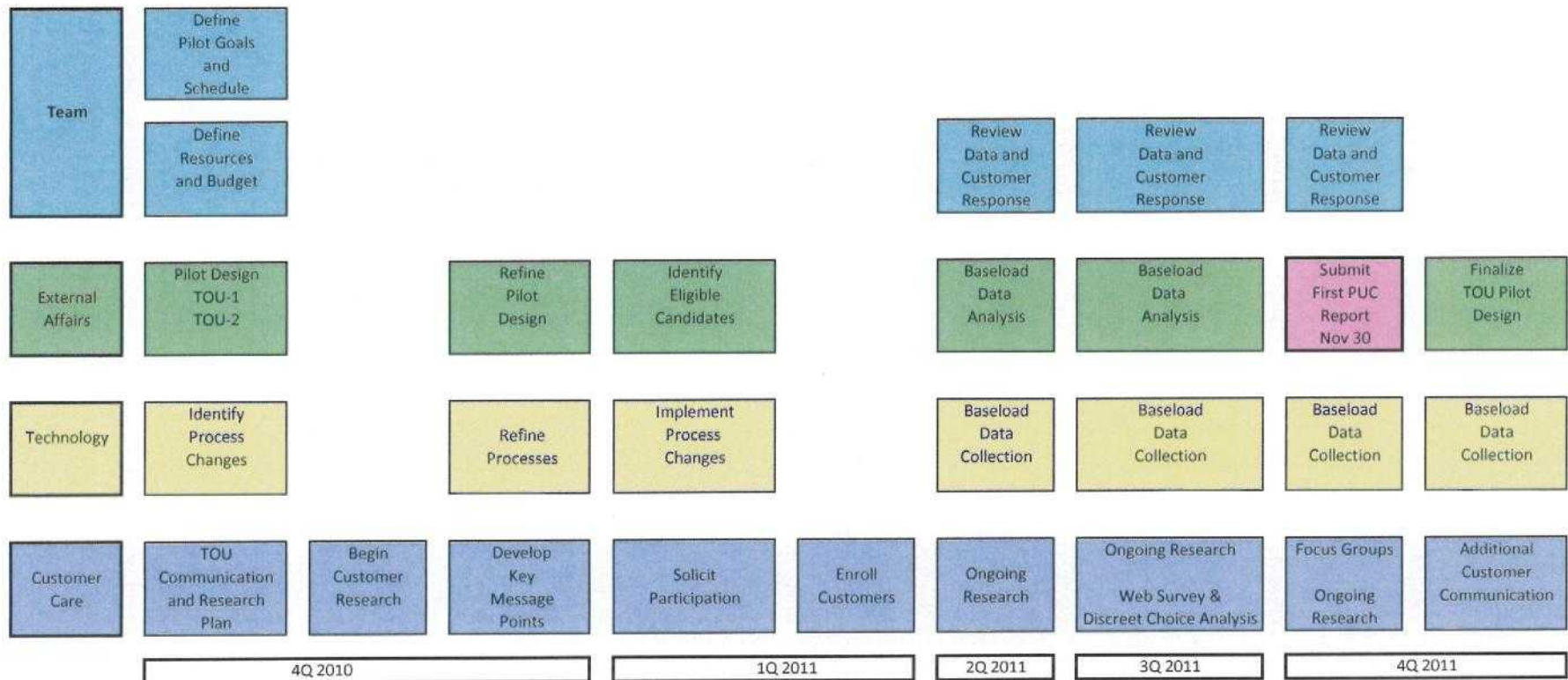
We will also evaluate and consider enhancements to the Smart Sense Program to further educate customers such as:

- Interactive web tools (e.g. savings if change behavior, savings if shift laundry to off-peak, how many kWh's does an appliance use)
- “What-if” tool
- Graphs – usage or dollars vs. temperature, hour, day of week
- Comparison to hourly market prices (i.e. to serve as benchmark)
- Comparison of what the participants’ bill would have been under the current residential default supply rate – show savings or additional cost.
- Show generically how other participants are doing.
- Cost / value of air conditioning as it relates to savings (bill and energy)

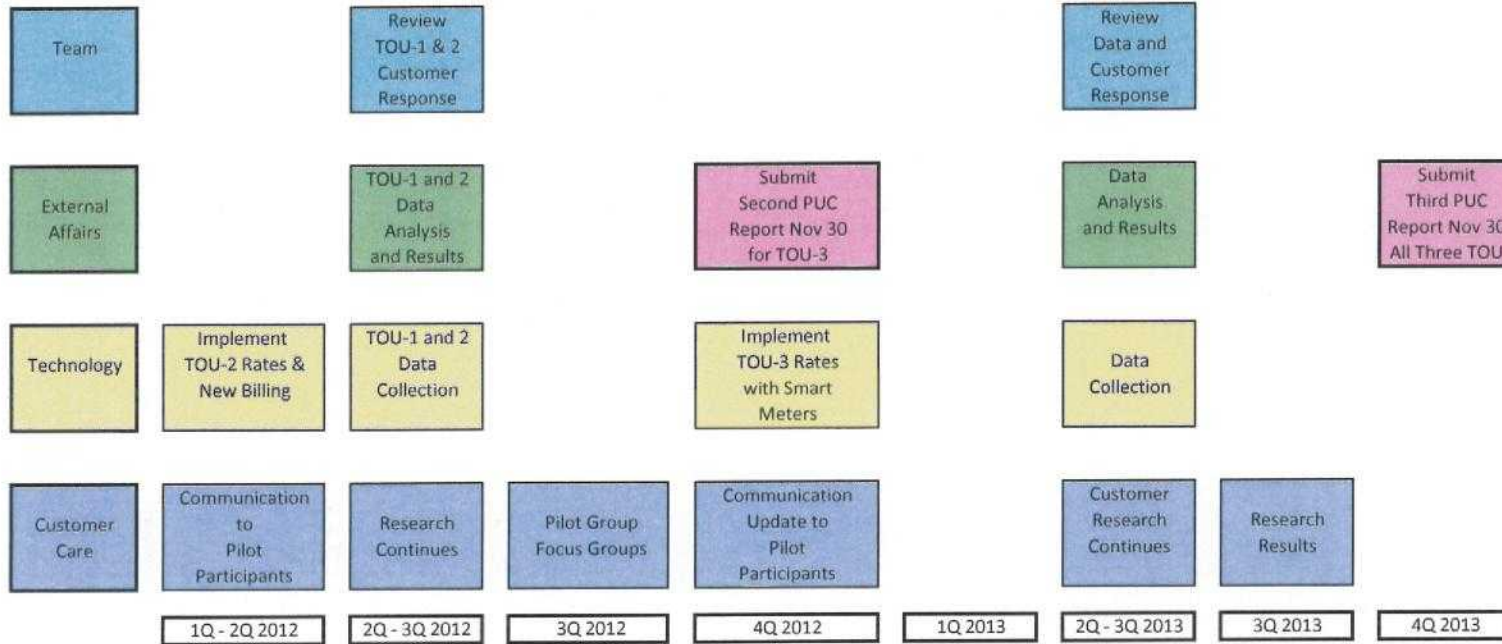
# **Attachment 1**

## **TOU Timeline by Quarter**

## Duquesne Light Company TOU Implementation Plan



**Duquesne Light Company  
TOU Implementation Plan**



# **Attachment 2**

## **Timeline**



**Duquesne Light Company Time-of-Use Implementation Plan  
Business Plan and Timeline of Filings**

r4 11/11/2010  
r3 11/03-04/2010  
r2 10/11/2010  
r1 8/26/2010

Week of	Scope/Processes	COMPLETE	Deliverable	Team
		Status		Responsibility
4Q 2010 → r2 10/11/2010 r1 9/13/2010  ↓	<b>1</b> <b>Conduct Market Analysis and Proposed Pilot Program Plans</b> <b>1</b> <b>Scope of Work -- Establish Internal Processes and Accountability</b> Define TOU project goals Achieve regulatory compliance Measure customer response Create seamless transition to all customers Determine impact on business processes (e.g. POLR VI) Assess impact on competitive market (e.g. EGS) Prepare for dynamic and critical peak pricing  <b>2</b> <b>Prepare project timeline:</b> Comply with regulatory filing dates Complement smart meter roll-out Interplay with other communication initiatives Interplay with Act 129 goals (e.g. complement or mutually exclusive)  <b>3</b> <b>Define internal resources and assignments</b>  <b>4</b> <b>Estimate budget</b> Define funding sources and assignment of funds for 2011-2015 Business Plan Internal (e.g. individuals, technology changes) External (e.g. consultants, mailings, surveys) Customer (e.g. incentives for participation in program) Cost recovery		r3 11/04/2010 Scope of Work Document	Team
			Timeline -- r3 11/03/2010	EA
			TOU Implementation Plan Quarterly Timeline Document -- r2 11/04/2010	Team
			Budget -- r1 11/04/2010	Team
4Q 2010 ↓ r2 10/11/2010 r1 9/13/2010  ↓	<b>6</b> <b>Define Residential Pilot Program Participation Criteria</b> Rate Schedules RS, RH and RA Single family home, Townhomes, Patio Homes, Condominiums Homeowner - No Rental Service must be in applying parties' name and he/she must show proof of residency 1,000+ kWh usage during each month of June, July and August Permanent A/C or heat pump POLR customers only Non-CAP customer Customer must stay in the pilot until completion in 2012 Customer must agree to answer surveys and attend a focus group if invited Customer must complete demographic form Customer must agree to and complete customer participation agreement Contingency plan for customer drop from pilot Establish process for enrollment (e.g. first subscribers, highest users) No special riders (e.g. Rider No. 19)		Customer Eligibility Criteria Document -- r3 10/27/2010 -- r3 11/03/2010	EA
4Q 2010 ↓	<b>7</b> <b>Identify eligible program participants / list for mailing</b>			EA/T
4Q 2010 ↓	<b>8</b> <b>Prepare Program Administrative Documents</b> Demographic form (i.e. premise & household data) Consent form (i.e. customer obligations & implications) Privacy Statement (i.e. in regard to customer data)		Data base -- r2 11/09/2010	EA EA EA
4Q 2010 ↓	<b>9</b> <b>Draft program design for customer feedback</b> TOU-1: Weekday Reduction Plan TOU-2: Pricing Plan Design for revenue neutrality Evaluate impact to Duquesne Power Summer TOU rate or year round TOU rate Customer incentive level Potential impacts in POLR VI Program name(s)		Pilot Program Descriptions Document -- r1 10/08/2010 -- r3 11/03/2010 -- r3 11/03/2010 -- r1 10/11/2010	EA

**Duquesne Light Company Time-of-Use Implementation Plan  
Business Plan and Timeline of Filings**

r4 11/11/2010  
r3 11/03 - 04/2010  
r2 10/11/2010  
r1 8/26/2010

AC 2010 ↓	Week of	Scope/Processes	COMPLETE		Team EA = External Affairs CC = Customer Care T = Technology Responsibility
			Status	Deliverable	
↓	r2 10/11/2010 r1 9/20/2010	30 <b>Define Customer Research Objectives</b>			
		31 Measure attitude and perception Survey eligible participants vs. entire population Time of use rate concept (e.g. applicable to supply rate only) Expected savings		Pilot Program Description Options Document — r3 11/03/2010	CC
		32 Customer Research Means Surveys, focus groups and possibly on-line			CC
		33 Draft scope of work for market research firm		Document — r3 11/03/2010	CC
↓	r2 10/11/2010 r1 9/27/2010	34 Begin TOU question in monthly customer surveys		Scope of Work — r3 11/03/2010	CC
		15 <b>Begin Drafting Educational Material</b> Develop core messages describing fundamental concepts of TOU rates and customer benefits Begin drafting pilot program materials, identify media channel(s) Bill message Service Line Direct mail piece to likely candidates Alignment with other Company messages / image Follow-up communications to prime target group Welcome communication to customers choosing to participate in program Current Topics		Smart Sense Brochure — r1 10/07/2010  r3 11/03/2010 r3 11/09/2010  Automatic "Welcome" E-Mail Document	CC CC/EA CC
		16 <b>Draft Scope of Work for Technology Group (for example):</b> Create interactive educational web site for customers Create on-line survey Create TOU Pilot enrollment link Create a dedicated educational and interactive TOU telephone AVR selection Create electronic survey option which would capture, sort and store results Web and AVR based TOU Pilot enrollment option Identify billing changes (i.e., bill design) Identify changes to meter reading process and data storage Use/expansion of home energy center on web Enrollment link to Customer Participation Agreement		Smart Sense Web Site  Scope of Work	Team T T T T T T T CC/T
		17 <b>Identify Potential Process Changes</b> Develop scope for CSR training and assessment Develop process for customer request for data (similar to Supplier web site) Develop process for data gathering and evaluation Direct customers to www.duquesnelight.com web site and to look for the TOU link for further information Direct customers to call (who?) for further information and/or with any questions		r3 11/04/2010  Smart Sense Web Site Address Smart Sense E-Mail Address/Document	CC CC/T T T
↓		18 <b>Customer Research</b> Begin surveying general customer population		Dedicated TOU link Dedicated TOU AVR	CC
		19 <b>Refine Processes and Programs Based on Market Analysis and Customer Research</b> Pilot program design Communication material Internal processes and infrastructure		r3 11/03/2010  r3 11/03/2010	Team

Duquesne Light Company Time-of-Use Implementation Plan  
Business Plan and Timeline of Filings

r 11/11/2010  
r 11/05 - 04/2010  
r 2 10/11/2010  
r 18/26/2010

Week of	Scope/Processes	COMPLETE	Deliverable	Team Responsibility	
1Q 2011	20 Implement Internal Processes Finalize process changes based on customer research Install infrastructure Establish meter reading process and data storage Gather pre-pilot baseline data for conservation TOU program Finalize budget and assignment of funding		Installation Updates Budget Document	Team T T T/EA Team	
	Perform customer screening per Pilot TOU criteria		Final Budget	CC	
	Define cost tracking process (e.g. activity numbers)		Document	EA/CC	
	Establish billing changes (i.e. bill design)			T	
	21 Solicit Customer Participation Follow-up communications to prime target group		Customer Invitation Letter	CC	
	3/7/2011	22 Enroll Customers Welcome communication to customers choosing to participate in program On-line and dedicated telephone number Perform customer screening per TOU criteria Customer must complete demographic form Customer must complete consent form which contains customer obligations / implications of non compliance Privacy Statement in regard to customer data		Web Site and Auto E-Mail	CC/T CC
				Demographic Survey Document	CC
				Privacy Policy Statement Document	CC
				Document	CC
	2Q 2011	4/25/2011 23 Customer Enrollment Complete Begin Demographic Survey		Document Document	CC/T
24 Contingency Customers Enrolled (if applicable)			Data Base	Team Team	
5/1/2011 25 Base Load Data Collection Begins				T	
3Q 2011	5/1/2011 26 Provide verbal update to Office of Consumer Advocate (OCA)		Document/Data Base	EA	
	27 Base Load Data Collection, Evaluation and Customer Feedback		r1 11/04/2010	Team	
	Customer feedback on program design Rate design (e.g. on peak hours, 12 month vs. summer month pricing) Response to participation criteria (see above) Type of information they would like to see Measure reaction to communication tools (e.g. web, email, call-in) On-line survey		Data Base Document	CC/EA	
9/5/2011 28 Final Analysis - Base load data collection, evaluation and customer feedback		Document/Data Base	Team		
29 Base load data collection, evaluation and customer feedback			Team		
	Small C & I research - when?				

Duquesne Light Company Time-of-Use Implementation Plan  
Business Plan and Timeline of Filings

r4 11/11/2010  
r3 11/03 - 04/2010  
r2 10/11/2010  
r1 8/26/2010

	Week of	Scope/Processes	COMPLETE	Status	Deliverable	Team Responsibility
4Q 2011		30 Prepare filing, Tariff Supplement(s), Tariff Rider, etc. for Team Review				EA
	→	31 File First Report to PaPUC November 30, 2011			Final Report	EA
↓	12/1/2011	32 Customer Education Continue communication to participants TOU story in ServiceLine				CC/EA
	↓					CC CC
1Q 2012	→	33 Implement TOU-1 and TOU-2 Residential Pilot Programs			Document r3 11/03/2010 Document	Team
	↓	34 Customer Education Communication to pilot participants Note programs go into full effect this year Provide details on how programs will work Thank you for taking part			r3 11/03/2010 Document	CC
↓	5/1/2012	35 Provide verbal update to Office of Consumer Advocate (OCA)			Document Document	EA
	→	36 Implement New Rates and Billing			r1 11/04/2010	T
2Q 2012	↓	37 Customer Education, research, communication TOU story in ServiceLine			r1 11/04/2010 r3 11/03/2010 Document	CC/EA
	↓					Team
3Q 2012		38 TOU-1 and TOU-2 Data Collection and Analysis				EA
	↓	39 Prepare Program for Commission Approval Effective 2013 with Smart Meters				EA
↓		40 Results of program participation. Feedback from program participants Proposed pricing and structure Enhancements to existing program Recommendations for customer participation Describe plans to integrate with smart meter deployment and default service plans Describe TOU options for small and medium C&I customers				EA
	→	41 Implement TOU-3 Pricing Program to Smart Meter Customers Implement TOU for Smart Meter Customers Conduct Robust TOU Plan Customer Surveys Selection Post Implementation Evaluation Supplemental Filing - Pilot Results and Plans for 2014 Smart Meter Full Deployment				EA
4Q 2012	→	41 File Second Report to PaPUC November 30, 2012			Final Report	EA
	↓	Customer Research Focus groups of program participants Based on research and market analysis, the team will: Evaluate pilot program results and alignment with program goals Evaluate pricing options for small and medium C&I customers Assess impact of TOU requirements associated with default service plan effective June 2013				CC
↓		42 Customer Communications Communication to pilot participants - update on current programs, thank you Similar communications to prime target group Welcome communications to 2013 participants TOU story in ServiceLine			r3 11/03/2010	Team
	↓	43 Expand and implement pricing programs prior to the summer of 2013 Adjust for customer feedback from the 2011-2012 pilots Expand to include robust analysis and pricing signals Explore new price options (e.g. reductions below base line, rebates) Determine pricing alternatives (TOU, CPP, Seasonal or Year Round TOU) Determine need for immediate feedback to customers in regard to their savings by shifting usage				

**Duquesne Light Company Time-of-Use Implementation Plan  
Business Plan and Timeline of Filings**

r4 11/11/2010  
r3 11/04 - 08/2010  
r2 10/11/2010  
r1 8/26/2010

Week of	Scope/Processes	COMPLETE	Deliverable	Team
		Status		Responsibility
1Q 2013 ↓	44 Customer Communications Pilot program customer testimonials in ServiceLine article, brochures, web site, etc. Follow-up communications to prime target group to expand to 8000 customers Welcome communication to new participants in 2013 Surveys continue of all groups		r3 11/03/2010 Document Document Document Document	CC
2Q 2013	5/1/2013 45 Provide verbal update to Office of Consumer Advocate (OCA)		Document Document Document	EA
	5/1/2013 46 Implement TOU-3 (residential and small and medium C&I pilot pricing programs) Data collection Data analysis Customer response / reactions		r1 11/04/2010  Document Document Document	Team
4Q 2013 ↓	47 Customer Research Focus groups of program participants Assess need for additional communications		Document Document Document	CC/EA
	48 Submit pricing plans for Commission approval (2014)			EA
	49 Prepare filing, Tariff Supplement(s), Tariff Rider, etc. for Team Review		Document r3 11/03/2010	EA
	50 File Third Report to PaPUC November 30, 2013		Final Report	EA

# **Attachment 3**

## **Budget**

**Duquesne Light Company**  
**Smart Sense TOU Pilot Program Budget - Annual**

Scope	2011	2012	2013	Total Project
<u>Residential Program</u>				
Develop/research program name	\$8,000			\$8,000
Prepare and print program literature	\$41,600			\$41,600
Solicitation and Invitation mailing	\$150,000			\$150,000
Customer incentive- enrollment	\$34,500			\$34,500
Install hourly meters & communication	\$100,000			\$100,000
Web-survey of participants	\$38,000	\$36,000	\$10,000	\$84,000
Focus groups	\$40,000	\$40,000	\$40,000	\$120,000
Home & Garden Show - literature		\$50,000	\$25,000	\$75,000
Time-of-Day participant mailing - energy data		\$2,000	\$15,000	\$17,000
Customer incentive - program completion		\$157,500		\$157,500
Customer Incentive-10% savings		\$40,000		\$40,000
<u>Small C&amp;I Program</u>				
Initial research		\$25,000		\$25,000
Prepare and print program literature		\$30,000	\$20,000	\$50,000
Solicitation and Invitation mailing			\$75,000	\$75,000
Participation mailing			\$50,000	\$50,000
Web-survey of participants			\$25,000	\$25,000
Focus groups			\$40,000	\$40,000
<b>Total</b>	<b>\$412,100</b>	<b>\$380,500</b>	<b>\$300,000</b>	<b>\$1,092,600</b>

Duquesne Light Company  
Smart Sense TOU Pilot Program Budget - By Quarter

Scope	Assumptions		2011				2011 Total	2012				2012 Total	2013				2013 Total	2011-2012 Project Total
	Customers	Cost/ Customer	1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q		1Q	2Q	3Q	4Q		
<b>Residential Program</b>																		
Develop/research program name			\$8,000				\$8,000										\$8,000	\$8,000
Prepare and print program literature				\$41,600			\$41,600										\$41,600	\$41,600
Solicitation and invitation mailing	150,000	\$1.00		\$150,000			\$150,000										\$150,000	\$150,000
Customer incentive- enrollment	1,500	\$23.00		\$34,500			\$34,500										\$34,500	\$34,500
Install hourly meters & communication	100	\$1,000			\$100,000		\$100,000										\$100,000	\$100,000
Web-survey of participants				\$27,000	\$11,000		\$38,000	\$18,000	\$18,000		\$36,000		\$10,000		\$10,000		\$84,000	\$84,000
Focus groups					\$40,000		\$40,000			\$40,000			\$40,000		\$40,000		\$40,000	\$120,000
Home & Garden Show - literature								\$25,000	\$25,000		\$50,000	\$25,000			\$25,000		\$75,000	\$75,000
Time-of-Day participant mailing - energy data	100	\$20.00					\$2,000				\$2,000		\$15,000		\$15,000		\$17,000	\$17,000
Customer incentive - program completion	1,500	\$105.00								\$157,500		\$157,500					\$157,500	\$157,500
Customer Incentive-10% savings										\$40,000		\$40,000					\$40,000	\$40,000
<b>Small C&amp;I Program</b>																		
Initial research										\$25,000		\$25,000					\$25,000	\$25,000
Prepare and print program literature										\$30,000		\$30,000				\$20,000	\$20,000	\$50,000
Solicitation and invitation mailing	25,000	\$1.50									\$37,500				\$37,500		\$75,000	\$75,000
Participation mailing	5,000	\$10.00									\$50,000				\$50,000		\$50,000	\$50,000
Web-survey of participants												\$25,000			\$25,000		\$25,000	\$25,000
Focus groups													\$40,000		\$40,000		\$40,000	\$40,000
<b>Total</b>			\$8,000	\$253,100	\$151,000	\$0	\$412,100	\$27,000	\$43,000	\$280,500	\$30,000	\$380,500	\$112,500	\$40,000	\$90,000	\$57,500	\$300,000	\$1,092,600



# **Attachment 4**

## **Communications/Research Overview**

## Time-of-Use and Real Time Pricing Plan Communications/Research Overview

In order to be prepared to offer a large-scale Time-of-Use (TOU) program for 8,000 customers in 2013, the company plans to implement two smaller residential pilot programs in 2011. This overview highlights communications and research support for this project. Since the company has not yet received, and analyzed, the PUC's order approving our plan, timeframes are estimated and are subject to change.

The TOU Work Team believes that residential customers who typically use at least 1,000 kilowatt-hours or more per month during each of the months of June, July and August are the prime candidates for the 2011 pilots. There are approximately 60,000 customers who meet this usage profile. As a result, we propose a two-tiered communications/ research approach.

- The pool of approximately 60,000 large residential users will be the prime target of specialized communications and research.
- In addition, all of our residential customers will receive information on the program through **ServiceLine** and the company website. Questions also will be added to the monthly tracker survey to gauge overall customer opinions on various TOU aspects.

Because of the small size, extended timeline and limited scope of the pilots, we believe it is important to not initially overpromote the impact/benefits of the company's TOU program.

For example, during 2011, the first year of both the 1,000-customer Time of Week pilot and the 100-customer Time of Day pilot, the company will only be collecting baseline data necessary for program evaluation. Customers will take no actions other than signing up for the program and providing demographic data. Thus, the "prime-time" for these pilots will not be until the summer of 2012, which is two year's away.

As a result, the prime goal of related communications and research will be to help the initial pilots achieve targeted participation levels and provide customer data that will help the larger 2013 program be successful. The secondary goal will be to provide adequate communications to all customers that can be ramped up, as necessary, depending on the future direction of the company's overall TOU program, as well as to educate and increase awareness of future pricing concepts.

Following is a proposed timeline.

-more-

## **2QR 2010**

- Development of research components through consultations with Market Strategies International, which conducts current monthly customer satisfaction surveys: As noted earlier, we anticipate adding TOU questions to the existing monthly customer surveys. We also plan to conduct both surveys and focus groups involving the prime target group of large residential electric users. Potential survey topics include customer attitude and perception about electricity and conservation, reaction to TOU products and communication tools (e.g. web, email, call-in etc.) customers prefer to gain access to TOU data.
- As needed, refine Communications/Research Components based on any changes to original company plan in PUC final order.

## **3QR 2010**

- Begin TOU questions in monthly customer surveys.

## **4QR 2010**

- Develop messages about fundamental concepts of TOU rates and customer benefits.
- Send initial communication to prime target group, explaining 2011 and 2012 pilot programs, as well as plans to follow-up with surveys/focus groups. Include means for interested parties to contact DL.
- Include general TOU story in issue of ServiceLine, noting it's an evolution of Act 129/Watt Choices programs.

## **1QR 2011**

- Follow-up communications to prime target group (as needed until adequate number has signed up).
- Welcome communication to customers choosing to participate in program, including explanation of how the programs will work.
- Begin surveys of prime target group (timing – quarterly/twice a year, etc. – to be determined).

## **2QR 2011**

- TOU article in ServiceLine

## **4QR 2011**

- Communication to prime target group providing update on current pilot programs and noting planned expansion of program in 2013.
- Feature TOU story in issue of ServiceLine.

-more-

### **1QR 2012**

- Communication to pilot participants noting the programs will go into full operation this year, providing specific details on how that will work, and thanking them for taking part.
- Surveys continue of all groups (as determined above).

### **2QR 2012**

- TOU article in ServiceLine

### **3QR 2012**

- Focus groups of program participants.

### **4QR 2012**

- Communication to pilot participants providing update on current programs, thanking them for their participation, and noting planned expansion of program in 2013. Provide means to get more info and/or sign up for 2013 program.
- Similar communication to prime target group.
- Welcome communication to customers choosing to participate in 2013 program, including explanation of how the programs will work.
- Include TOU story in issue of ServiceLine, noting plans for 2013 program, inviting general population customers to take part (if needed).

### **1QR 2013**

- Follow-up communications to prime target group (as needed until adequate number has signed up for 2013 program (8,000)).
- Welcome communication to customers choosing to participate in 2013 program, including explanation of how the programs will work.
- Surveys continue of all groups.

### **3QR 2013**

- Focus groups of program participants
- Determine if additional individual communication is needed for program participants or if all communications can be transitioned to ServiceLine/ website.

###

# **Attachment 5**

***ServiceLine***



# ServiceLine

A power-filled publication brought to you by  Duquesne Light



## MORE OPTIONS TO SAVE ENERGY & MONEY

### A 'Smart' Meter Is in Your Future

The Public Utility Commission recently approved Duquesne Light's plan to provide all customers smart-meter technology as part of its overall response to requirements of statewide energy-conservation legislation, Act 129, enacted in 2008.

Many of you already are saving energy and money through our Watt Choices program, which helps customers conserve energy while lowering their electricity costs through rebates for the installation of energy-efficient equipment, discounts on the purchase of compact fluorescent light bulbs and the recycling of old refrigerators and freezers. Smart meter technology – to be installed over the next eight years – will provide customers even more opportunities to manage their electricity consumption.

Traditional electric meters only measure the amount of power you use. Smart meters also measure when energy was consumed. Additional convenient smart-meter features will include web access to daily usage information and communications with in-home devices that provide near real-time price data. Duquesne Light also will offer optional time-of-use rates to customers who are willing to shift a portion of their electric usage to off-peak periods.

By having access to near real-time information, you can make more informed decisions on how you use



energy in a typical day. You also can determine if changing your behavior can help decrease your electric usage. In addition, by switching the time you do certain chores, such as using the clothes dryer or dishwasher, you eventually will be able to take advantage of lower electric rates.

There's a third way smart meters can benefit you – and help the environment. By using less power during hot spells in the summer, you reduce the need for utilities to purchase

electric generation when prices are at their highest (because customer demand typically is very high at that time). Lowering this peak customer demand will reduce the cost utilities and customers pay for this higher-priced power. It also benefits the environment by reducing the need for less efficient power plants to be used during peak periods.

Duquesne Light's tiered rollout of smart meters will begin in 2013. To ensure that the system-wide

rollout of smart meters is both cost-effective and in the best interest of our customers, Duquesne Light will conduct a thorough upfront analysis and a controlled implementation of the technology because meters are only one component of this massive project. Communications, infrastructure and other network systems are all needed to make the meter "smart."

As part of that process, Duquesne Light will be conducting two pilot programs in 2011-2012 involving approximately 1,100 customers. Early this year, we'll be looking for pioneering local homeowners interested in helping us develop a smart-meter program, in conjunction with time-of-use rates, that will benefit all of our customers.

We look forward to working with customers to create a smart meter/time-of-use program that provides opportunities for better personal management of their electric use while also helping to maintain a reliable, sustainable energy system. Ongoing customer education will be an important part of that process. Public Utility Commissioner Tyrone Christy said it best: "Smart meters will not work without smart consumers." Look for more information in **ServiceLine** and on our website, [duquesnelight.com](http://duquesnelight.com), in the months and years to come.

### New Default-Service Rates Go Into Effect Jan. 1

As detailed in the August issue of **ServiceLine**, Duquesne Light's new default-service electric supply rates for customers who do not choose to use another supplier go into effect Jan. 1, 2011.

Under our default-service plan, residential customers will have a fixed generation price through May 2013. The average residential customer using 600 kilowatt-hours per month will see an increase of \$4.23 in the overall monthly bill (\$82.59 to \$86.82).

Duquesne Light customers can choose to get their electricity from a competitive energy supplier at any time. You can seek offers from suppliers that may offer lower electricity supply prices; renewable

energy products or other supply products.

Customers seeking offers can go to [www.papowerswitch.com](http://www.papowerswitch.com). PAPowerSwitch is the Public Utility Commission's new website to help



consumers shop for power suppliers. Plug in your ZIP code and the site will give you a list of suppliers that service residential and commercial users in your area. You can then click on those suppliers and enter your monthly electrical usage to compare their charges. Part of that listing includes Duquesne Light's Price to Compare (PTC), currently at 8.89 cents per kilowatt-hour. Our PTC is the price we charge for our default supply service.

*Continued on back page.*

### Live Chat Option Now Available



Customers using our website, [DuquesneLight.com](http://DuquesneLight.com), to start, stop or transfer service now can use a "live-chat" option for assistance. Live chat enables you to interact with us in "real time" and quickly resolve any questions you have. Based on customer response, Duquesne Light will expand Live Chat to billing and credit inquiries.

## CONSERVATION DAY CELEBRATED AT CARNEGIE SCIENCE CENTER JAN. 17

Duquesne Light partnered with Carnegie Science Center to offer a day of environmentally themed programming for all ages on Martin Luther King Day. All visitors enjoyed free general admission, an Omnimax film, and parking on Duquesne Light Conservation Day, Monday, Jan. 17, 2011.

During Duquesne Light Conservation Day, visitors were able to explore the Science Center's four floors of hands-on exhibits; experience the latest Science on the Road program, Home Makeover: Green Edition, produced in partnership with Duquesne Light, as well as Captain Green's Time Machine; and watch an environmentally themed Omnimax film, *Hurricane on the Bayou*, on the biggest screen in Pittsburgh. Wattle, Duquesne Light's WATT CHOICES mascot, also was on hand for the festivities.

"Conservation Day at the Science Center provides a great opportunity to provide education about conserving energy to the younger generation

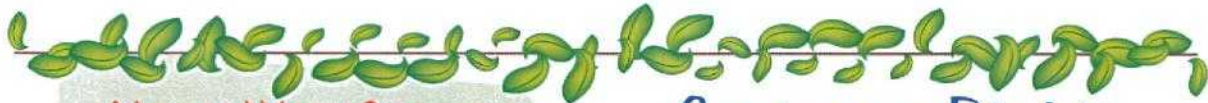


**CARNEGIE  
SCIENCE  
CENTER**

One of the four Carnegie Museums of Pittsburgh

in a fun environment, while also celebrating the contributions Dr. King made to America," said Michele Sandoe, director of Customer Care at Duquesne Light.

Free general admission, Omnimax film, and parking on Jan. 17 were subject to availability.



**MAJOR WATT CHOICES  
CFL DISCOUNTS NOW  
AVAILABLE AT WAL-MART,  
ACE, TRUE VALUE, LOWE'S**



**WATT  
CHOICES**

Duquesne Light's partnership with local retailers to provide compact fluorescent light bulbs (CFLs) at major discounts – 50 percent, on average – has now expanded to more than 130 stores in the Pittsburgh region.

Wal-Mart, Ace and True Value hardware stores and Lowe's locations now are offering the CFL discounts, as well as Costco, The Home Depot, Sam's Club, CVS, Family Dollar, Dollar Tree, Goodwill, Do It Best Hardware, and many independent hardware stores. Look for more locations in the new year, including Giant Eagle stores. Click on the "CFL Instant Savings" page on [wattchoices.com](http://wattchoices.com), or call 1-888-379-8231 to find the nearest participating retailer.

Look for special in-store displays. No rebate forms are needed, since the discounted price will be charged at the register.

## Customer Rights Booklet Available

Pennsylvania has a defined set of rights and responsibilities to ensure fair dealings between residential customers and their utility company. Consumers can receive a free copy of the "Your Rights and Responsibilities as a Utility Customer" booklet. The booklet being offered is a reprint of the version that initially was made available in 2006. This booklet explains, in general terms, how electric, natural gas and other public utilities in Pennsylvania handle certain practices, such as billing, credit, disputes and service terminations. For a copy of the booklet, visit our website, [www.duquesnelight.com](http://www.duquesnelight.com) (click on the "Customer Services" heading, then "General Information"), call 412-393-7100, or complete and return the coupon below.



Please send me a copy of "Your Rights and Responsibilities as a Utility Customer."

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

UTILITY ACCOUNT NUMBER (SHOWN ON YOUR BILL) \_\_\_\_\_

Return this coupon in a stamped envelope to:  
Duquesne Light  
Mail Drop 5-1  
P.O. Box 1930  
Pittsburgh, PA 15230-1930

Please do NOT enclose with your bill payment. The Pennsylvania Public Utility Commission requires that this information be available to all utility consumers without charge.

### HOW TO REACH DUQUESNE LIGHT

Customer Service .....	1-888-393-7100
Outages and Emergencies .....	1-888-393-7000
TDD (Telecommunications Device for the Deaf) .....	412-393-4320
Credit & Collection .....	412-393-7200
Department and Employee Directories .....	412-393-6000
Universal Services (Energy Assistance) .....	1-888-393-7600
Time and Temperature .....	412-391-9500

### New Default-Service Rates Continued from front

Keep in mind that you only can switch the company that supplies your power, not the company that transmits and distributes it. That means that the sample costs for power generation that you see online represent only part of what your total monthly cost of electricity would be.

If you don't have access to the Internet, you can call the PUC at 1-800-692-7380. Additional choice information also is available at [www.oca.state.pa.us](http://www.oca.state.pa.us), the website of the Pennsylvania Office of Consumer Advocate, or by calling the OCA at 1-800-684-6560.



Printed on recycled paper  
Issue 2011-01



# Service Line

A power-filled publication brought to you by  Duquesne Light



## TURN THAT OLD FRIDGE OR FREEZER INTO COLD CASH

**Y**ou don't have to be a magician in order to turn an old appliance into cold cash. All you have to do is take part in the Watt Choices refrigerator/freezer recycling program.

Many people have an extra refrigerator or freezer in the basement or garage that is used infrequently or just holds a small amount of food. While this may seem handy, these extra appliances are usually old models that use up to four times the electricity of newer, energy efficient ones. By getting rid of them, you can save up to \$150 per year in energy.

Duquesne Light's Watt Choices program will not only haul away the refrigerator or freezer for free, but pay you \$35 for recycling that old appliance. Our partner, JACO Environmental, will pick up the refrigerator or freezer and recycle 95 percent of the components in an environmentally safe way. You will receive your check within six weeks of pickup.

To schedule a pickup, call 1-877-270-3521 or visit [wattchoices.com](http://wattchoices.com). Refrigerators and freezers must be in working condition and must be a minimum of 10 cubic feet in size.

In addition to the appliance recycling program, Watt Choices helps customers conserve energy while lowering their electricity costs through rebates for the installation of energy-efficient equipment, online home energy audits and discounts on compact fluorescent light bulbs.



- **Get a \$35 rebate.**
- **Save up to \$150 a year on energy.**

To schedule a pickup, **call 1-877-270-3521** between 8 a.m. and 9 p.m., Monday through Friday, or between 10 a.m. and 6:30 p.m. on Saturdays. Or visit [wattchoices.com](http://wattchoices.com) to schedule online.

## Beat the Heat

### Key Tips for Seniors This Summer



**S**ummer brings many things, including high temperatures and humidity, that can result in heat-related illnesses. Senior citizens are especially vulnerable, so here are some tips for keeping cool and healthy during the summer:

- Drink plenty of water, even if you're not thirsty.
- Limit caffeine and alcohol, which can contribute to dehydration.
- Dress in lightweight, light-colored, loose-fitting clothing.
- Avoid strenuous activities.
- Eat smaller meals and eat more often.
- If you don't have air conditioning at home, go to the lowest level of your house or to a public place with air conditioning. Some municipalities designate air-conditioned buildings, such as recreation centers, as "cooling zones" for senior citizens.
- Stay indoors during the hottest part of the day, between noon and 4 p.m.
- At home, properly ventilate by using fans and opening windows. Light-color blinds or curtains can help deflect the sun's rays from heating up your house.
- Cook, take showers, do laundry and use appliances that produce heat and humidity early in the morning or late in the evening.

## Live Chat Option Now Available

got a question?  
**ASK LIVE!**

>> ONLINE



Just log on to [duquesnelight.com](http://duquesnelight.com) and look for the live chat icon. If you see that we are online, a Live Chat representative will be glad to assist you!



## Bright Beginning for New School Year

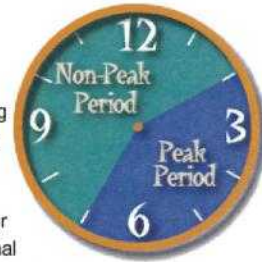


There is an easy, convenient and free way for college students to get the electricity turned on in their off-campus housing. Just visit [www.duquesnelight.com](http://www.duquesnelight.com) and look for the link at the top of the page that says "Start electric service."

You can register your account online in minutes if you have not already done so. You will need your account and meter numbers, so be sure you have your electric bill handy. At the end of the school year, you can use the same service to turn off your electricity.

This free online option is available to all Duquesne Light customers. To stop, start or transfer service, just let Duquesne Light know three days before you want your service changed.

## Strong Customer Response to Time-of-Use Pilot Program



Customer response was very strong to a recent invitation to participate in two related pilot programs to help us develop products that you are interested in, and to help us prepare for the upcoming switchover from traditional meters to "smart" meters. Named "Smart Sense," this pilot program will help us determine participants' understanding about energy usage and electricity pricing. By volunteering to participate in two Smart Sense pilot programs over the next two years, approximately 1,400 customers will help us develop time-of-use rates – in conjunction with a smart-meter-program – that will benefit all of our customers.

As part of its overall response to the requirements of statewide energy conservation legislation, Duquesne Light will begin installing smart-meter technology for its customers in 2013.

Our traditional meters only measure the amount of power you use in a day, while smart meters measure when energy was consumed during each hour of the day. By having access to near real-time information, customers will be able to make more informed decisions on how and when they use energy in a typical day. Time-of-use rates benefit customers who shift their usage from peak periods to non-peak periods. For example, we may offer pilot participants a higher supply rate from 2 p.m. to 7 p.m. on weekdays – the peak period of energy usage – and a lower supply rate for all other weekday hours and on weekends.

Updates on the Smart Sense pilot program will be featured in future editions of ServiceLine.

## ADD TO YOUR SUMMER CHECKLIST: HOME ENERGY AUDIT

We all have things we mean to do, but by the time we get around to them the opportunity has passed. Fortunately, this is not the case with our Watt Choices online home energy audit, which is available at [www.wattchoices.com](http://www.wattchoices.com) and ready when you are.

You begin by entering information about your house, including type and size, year built, average heating and cooling setting, and type of windows. The resulting audit incorporates your actual electric use history to produce a detailed report listing ways you can save energy and money. It is especially helpful to analyze how your family uses electricity during hot, humid, summer months.

When you enter your "active" account number to begin the online home energy audit, you also become eligible to receive a complimentary energy efficiency kit that contains compact fluorescent lights (CFLs), LED nightlights and a Smart Strip surge protector. The kit will be delivered to your Duquesne Light service address.



## Going Electric Shopping?

If you're interested in shopping for a new electricity supplier and aren't sure where to begin, head to [www.papowerswitch.com](http://www.papowerswitch.com), a website operated by the Pennsylvania Public Utility Commission (PUC). Type in your zip code and the site will give you a list of electric generation suppliers in your area, a comparison of their offers, and much more. You can also reach the PUC at 1-800-692-7380.

The website of the Pennsylvania Office of the Consumer Advocate, [www.oca.state.pa.us](http://www.oca.state.pa.us), is another good source of

information. There you will find a free online guide that provides "apples to apples" comparisons for alternative energy suppliers in each utility's service area in the state, including Duquesne Light's. You also can call 1-800-684-6560 for information.

**Social Media**  
 twitter.com/DuquesneLight  
 facebook.com/DuquesneLight  
 text DUQLIGHT to 94253

### HOW TO REACH DUQUESNE LIGHT

Customer Service	1-888-393-7100
Outages and Emergencies (Telecommunications Device for the Deaf)	1-888-393-7000 412-393-4320
Credit & Collection	412-393-7200
Department and Employee Directories	412-393-6000
Universal Services (Energy Assistance)	1-888-393-7600
Time and Temperature	412-391-9500
Watt Choices	1-888-WATTLEY (1-888-928-8539)

### HOLIDAY SCHEDULE FOR TELEPHONE SERVICE REPRESENTATIVES

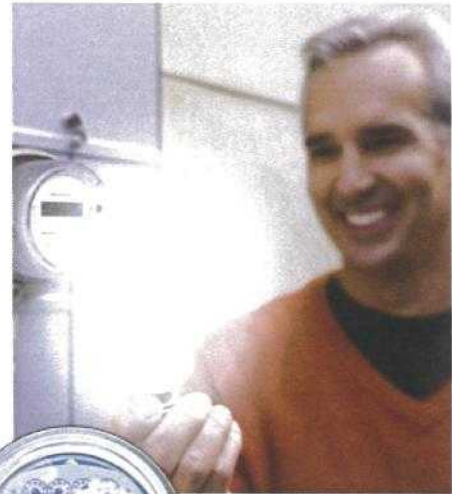
**Labor Day**  
 Monday, Sept. 5  
 Closed

**Duquesne Light**  
 Our Energy...Your Power™

Printed on recycled paper  
 Issue 2011-06

# **Attachment 6**

## **Program Solicitation**



## Earn \$120, Save Energy by Taking Part in Duquesne Light Pilot Program

*Brewing a morning pot of coffee. Emailing a friend. Watching your favorite TV show. Reading a bedtime story to your children. Electricity helps make a typical day typical.*

Take a quick look around your home and you'll notice the many things – besides lights – that are powered by electricity. At Duquesne Light, we're dedicated to providing our customers a safe, reliable supply of reasonably priced power. We're also committed to helping you get the most out of every dollar you spend on electricity.

As part of that commitment, we're currently in the very early stages of a program to install "smart-meter" technology throughout Allegheny and Beaver counties that will help residential customers, like you, better understand and manage your electric costs. The purpose of this letter is to invite you to participate in Smart Sense, a pilot program Duquesne Light will be conducting over the next two summers to help develop a smart-meter system with time-of-day rates that will benefit all customers.

You will be compensated for your full participation in Smart Sense, which is described in more detail in the enclosed brochure. You also may potentially save additional money by reducing the amount of electricity you use and by shifting part of your electric use to different times of the day or week.

You can sign up to take part in Smart Sense right now by going to [www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense).\* We encourage you to act quickly, though, because only a limited number of slots are available. Among the things we are looking for in potential participants are customers who receive their electricity supply from Duquesne Light and will commit to being part of the entire 18-month pilot.

We value you as a customer. Your consideration of our offer to participate in this important pilot program is truly appreciated. Thank you for helping us serve you better.

Sincerely,  
Duquesne Light Smart Sense Team  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

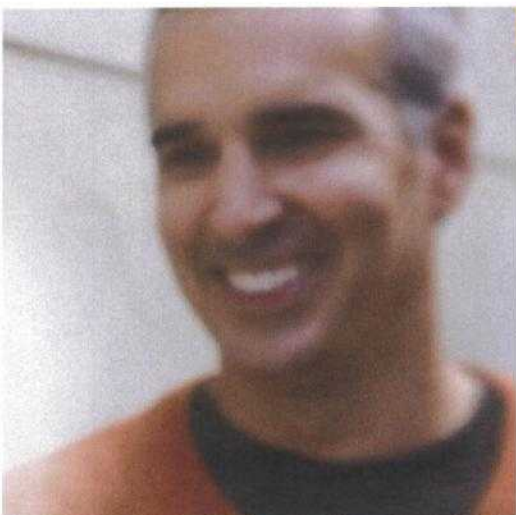
**Smart Sense**  
SAVE ENERGY. SMART!

**Duquesne Light**  
Our Energy...Your Power®

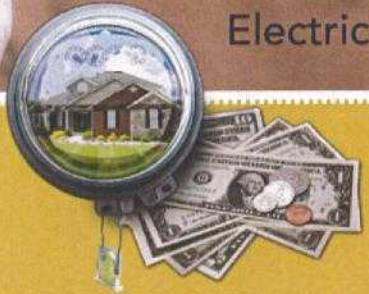
\*If you're not already registered on the Duquesne Light website, then you'll need to complete a simple enrollment process before signing up to participate in Smart Sense. You will need to have both your account number and meter number handy when registering. Both can be found on the first page of your monthly bill.

# Invitation Letter

# Brochure



and Help You  
**Save Energy on  
 Your Summer  
 Electric Bills**



Duquesne Light is developing new programs to help customers better understand and manage their electricity costs by reducing or shifting their usage during days when demand is the highest.

### More on Smart Meters

In 2013, Duquesne Light will begin installing "smart meters" as part of its overall response to requirements of statewide energy-conservation legislation, Act 129, enacted in 2008.

To ensure that the system-wide roll out of smart meters is both cost-effective and in the best interest of our customers, Duquesne Light will conduct a thorough upfront analysis and a controlled implementation of the technology, as meters are only one component of this massive project. Communications, infrastructure and other network systems are all needed to make the meters "smart."

**"Smart meters will not work without smart consumers."**  
PUC COMMISSIONER TYRONE CHRISTY

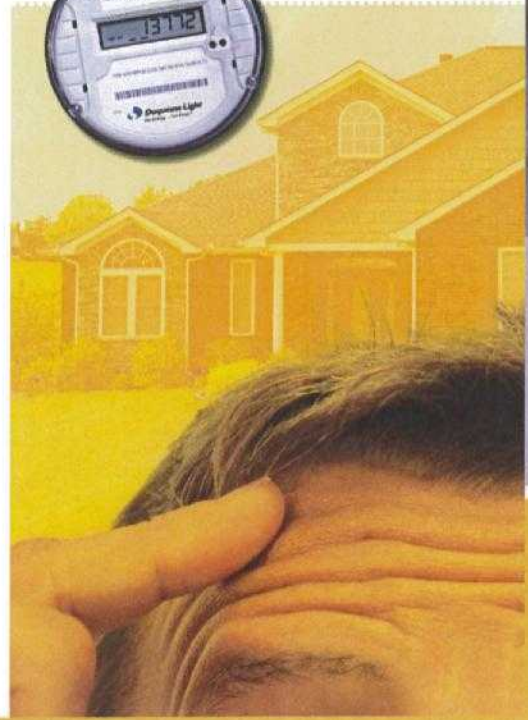
Ongoing customer education will be an important part of that process. Public Utility Commissioner Tyrone Christy said it best: "Smart meters will not work without smart consumers." We look forward to working with customers – beginning with the Smart Sense program – to create a smart meter system with time-of-day rates that provide opportunities for better personal management of their electric use while also helping to maintain a reliable, sustainable energy system.



[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)

## Smart Sense

SAVE ENERGY. SMART!

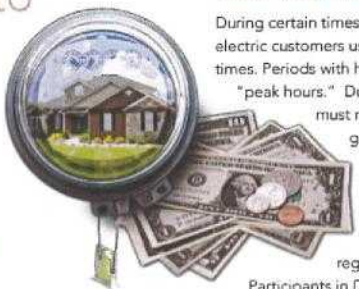


We'll  
**Pay You \$120**  
 to  
**Participate**

JOIN OUR  
**SMART SENSE**  
 PROGRAM



We invite you to be part of a pilot program that will help us develop a **smart meter system with time-of-day rates** that will benefit all customers.



### How the Program Will Work

During certain times of the day and year, electric customers use more power than at other times. Periods with heavier usage are called "peak hours." During these hours, utilities must run higher-cost, less-efficient generating facilities to meet consumer demand.

Utilities typically bill customers based on how much electricity they use, regardless of when they use it.

Participants in Duquesne Light's **Smart Sense** program will have the potential to save money by shifting their energy use away from higher cost, on-peak hours to lower cost, off-peak hours. Doing this will ultimately help utilities and energy suppliers to pass on cost savings from these efforts to customers.

The addition of this type of time-of-day rate option will be made easier by the installation of smart meters in Duquesne Light's service territory, beginning with 8,000 residences in 2013. Smart meters will enable utilities to offer different price options at different times of the day to more accurately reflect the costs of providing electricity.

While smart meters will not be available for the Smart Sense program, participants will have access to near real-time electric use information through a secure website. This data will help you make more informed decisions on how you use energy in a typical day, as well as determine if changing your behavior can help decrease your electric usage. In addition, by switching the time you do certain chores, such as using the clothes dryer or dishwasher, you can take advantage of lower electric rates.

By agreeing to participate for the full 18 months of the program, you will receive a total appreciation payment of \$120, as well as a variety of free energy-conservation information and products. You also may potentially save money on your monthly bill as a result of the changes you make in how you use electricity in your home. In addition, you will help us develop a key component of the Pittsburgh region's energy future.

### Program Timeline

#### FIRST STEPS:

You sign up for the program by filling out a participation form and a demographic survey at [www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense). After successfully completing the simple registration process, you will receive a \$20 pre-paid debit card.

#### SPRING 2011:

As needed, Duquesne Light will install equipment that will enable us to provide you with usage information that you can review through a secure website to help you evaluate how you use electricity.

#### JUNE/JULY/AUGUST 2011:

**No action is needed on your part in this first phase of the pilot program.** We will collect baseline information, for comparison, by measuring your usage during the summer months.

#### FEBRUARY 2012:

You will receive detailed information explaining the specifics of the pilot program, including peak and off-peak rate options, and suggestions on practical steps you can take to reduce your electric use or switch the timing of portions of your electric use to time periods with lower rates.

#### JUNE/JULY/AUGUST 2012:

**This is when you will need to take action to save money on your electric bill.** You can begin to save energy and money by using less electricity or shifting some of your electric use to off-peak periods. **But, again, you must take action in order to achieve savings.**

#### NOVEMBER 2012:

**You will receive a \$100 pre-paid debit card in appreciation of your successful completion of the Smart Sense program.**



We will be seeking your opinions throughout the 18-month program

As noted earlier, the goal of this pilot program is to develop a smart meter system and time-of-day rates that benefit all of our customers in the future. A key way to do that is to talk to you on a regular basis, through online and telephone surveys and – for some participants – in-person focus groups. This interaction will take place throughout the 18-month pilot.

 **Duquesne Light**  
Our Energy... Your Power™

) ' )

**Envelope**

---





**Duquesne Light**

*Our Energy...Your Power®*

411 Seventh Avenue

P.O. Box 1930

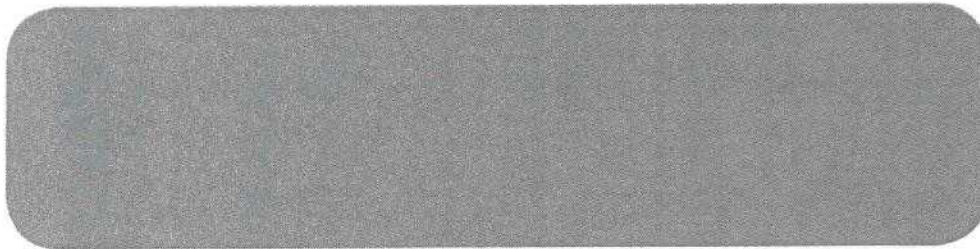
Pittsburgh, PA 15230-1930

ADDRESS SERVICE REQUESTED

FULFILLMENT  
HOUSE  
TO PRINT  
INDICIA?

**EARN \$120, SAVE ENERGY...**

JOIN OUR SMART SENSE PILOT PROGRAM!



# **Privacy Policy**



SEARCH  GO

Home Customer Services Our Community Storm Center News About Us  
Contact Us

lcombs@duquesnelight.com's view: Home: 8000-984-648-002

Profile Information | Log Out

### Welcome to Duquesne Light's Smart Sense Pilot Program

- Home
- What We Need From You
- Frequently Asked Questions
- Contact Us

You are enrolled in the Smart Sense Pilot Program.

#### Our Privacy Policy

As part of Duquesne Light Company's pilot time-of-use program, individual customer information will not be released for any purposes outside of the program. The information customers provide to the Company (account number, name, address, phone number, e-mail address) will be used for the sole purpose of assessing the pilot program and will not be sold or shared with any other company or agency.

Thanks again for taking part in the Smart Sense Pilot Program. Your participation will help us develop a key component in the Pittsburgh region's energy future.

#### Learn More About the Program

- [Review our privacy policy](#)
- [Read our participation agreement](#)
- [Pilot program descriptions](#)
- [What you will need to sign up](#)
- [Invitation Letter](#)
- [Brochure](#)
- [Frequently Asked Questions](#)

## **What You Will Need to Sign Up**


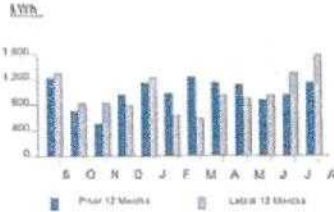

## Smart Sense Pilot Program

### What You Will Need to Sign Up

If you're not already registered on the Duquesne Light website, then you'll need to complete a simple enrollment process before signing up to participate in Smart Sense. You will need to have both your account number and meter number handy when registering. [Both can be found on the first page of your monthly bill.](#)

Your **METER NUMBER** is located in the "Meter Reading Usage Information" section in the upper left section of page one. It begins with either, D, F or G and is followed by eight (8) digits. You will need to enter the entire meter number.

Your **ACCOUNT NUMBER** is boxed and in the upper right corner of page one or page three of your bill. You will need to enter thirteen (13) digits, without the dashes.

		<b>Customer Name and Service Address:</b> SAMPLE CUSTOMER 123 SAMPLE DR PITTSBURGH, PA 15111-2222		<b>Account Number:</b> 0000-000-000-000										
				<b>Rate:</b> RS-Resistor Service <b>Date Prepared:</b> 09/09/02										
<b>Meter Reading Usage Information</b> Next Scheduled Meter Reading Date: September 5, 2002			<b>Summary</b>											
<b>Meter Read Information for Meter Number: G11111111</b> Present: Aug 05, 2002 - Actual: 1677 Prior: Jul 05, 2002 - Actual: 1637 Difference: 40 Your Meter Multiplier: x 40 Total kWh Used: 1660			<b>Prior Billing Information</b> Total Amount of Last Bill: \$122.34 Total Payment Received: \$731.02 Total Amount Owed From Your Last Bill: \$9.00											
<b>Electric Usage:</b> Comparing Your Usage <table border="1"> <tr> <td>Avg kWh Per Day</td> <td>Aug 01: 37</td> <td>Aug 02: 50</td> </tr> <tr> <td>Avg Temperature (°F)</td> <td>73</td> <td>79</td> </tr> <tr> <td>YTD Usage (kWh)</td> <td>8,690</td> <td>8,240</td> </tr> </table>			Avg kWh Per Day	Aug 01: 37	Aug 02: 50	Avg Temperature (°F)	73	79	YTD Usage (kWh)	8,690	8,240	<b>DLC Current Basic Charges:</b> Total DLC Basic Service Charges: \$55.67		
Avg kWh Per Day	Aug 01: 37	Aug 02: 50												
Avg Temperature (°F)	73	79												
YTD Usage (kWh)	8,690	8,240												
			<b>Supplier Current Charges:</b> Total Supplier Basic Service Charges: \$1.38 <b>Total Account Balance:</b> \$147.03 <b>Total DLC Basic Service Balance:</b> \$55.67 <b>Total Supplier Basic Service Balance:</b> \$91.36 <b>Total Budget Balance:</b> \$94.00											
Actual Meter Reading Bill See following pages for more detailed information. Please contact us with any billing questions before the due date on your bill. The "Budget Amount" and "Amount Due" include the estimated taxes as shown in the left boxes.														
Estimated Gross Receipts Tax	Estimated PA State Taxes	Late Charge after Sep 3, 2002	Payment Due Sep 3, 2002	Budget Amount	Amount Due									
\$6.47	\$10.00	\$0.70		\$94.00	or \$147.03									
Please return this portion with your payment. Make payment payable to Duquesne Light Company. Please enclose check facing forward.														
Account Number		YOU MAY PAY EITHER AMOUNT BY Sep 3, 2002												
0000-000-000-000		\$94.00		\$147.03										
Make changes to your name, phone or address on the back, and check here: @BUNHAYE @0000000000000000														
SAMPLE CUSTOMER 123 SAMPLE DR PITTSBURGH, PA 15111-2222			DUQUESNE LIGHT COMPANY PAYMENT PROCESSING CENTER PITTSBURGH, PA 15267-0001											
														
00000000000000 000000000000 000000000000 000000000000														

# **Customer Participation Agreement**

## Smart Sense Pilot Program

### Customer Participation Agreement

This Customer Participation Agreement ("Agreement") is made by and between the Duquesne Light Company ("Company") and the Customer ("Customer") for participation in one of the Company's Residential Service Time-of-Use ("TOU Pilot") programs. These TOU Pilot programs are part of the Company's "Smart Sense" program.

Enrollment in each TOU Pilot will be determined by the Company. After enrollment, the Company will request the customer's pilot preference. The Company will notify the customer by e-mail and let them know which pilot they were selected to participate in. The Company will make every effort to place a customer in their preferred pilot, but, if there is over and/or under enrollment in either pilot, the Company reserves the right to place the customer in the pilot that is not fully subscribed. All decisions made by the Company in regard to pilot selection are final.

Time of Week Pilot (TOU-1) -- Customers who reduce their baseline weekday kWh usage by at least 10% in the months of June, July or August 2012 will receive an additional 10% incentive credit on their Duquesne Light bill. The incentive credit will be based on their supply charges of the applicable month and shall not exceed 10% regardless of the level of kWh reduction. Baseline weekday kWh usage will be determined using June, July and August 2011 weekday kWh usage. The final design of the Time of Week Pilot will be known by January 1, 2012.

Time of Day Pilot (TOU-2) -- Customers will be charged supply rates that vary by time of day (e.g. lower at night and weekends and higher during weekday afternoons) during the months of June July and August of 2012. The supply rates will be charged according to the tariff which will be filed by the Company and known by January 1, 2012.

Pursuant to the Company's TOU Pilot, the Company offers an optional residential electricity service. A new meter may be installed at the Customer's location that allows the Customer to pay for electricity based on the time of day it is used. Upon entering into this Agreement with the Company to utilize the TOU Pilot, the current meter may be replaced by the Company with a meter and equipment that records hourly electricity usage during multiple time periods. Under this Agreement, the Company agrees to pay all costs directly associated with the purchase, installation and routine maintenance of the new meter. The Company agrees to provide information on the overall program to the Customer. In return for the Customer's participation in the TOU Pilot, Customers selected by the Company to be in the TOU Pilot will be provided with incentives throughout the Program Period. The Company will provide the Customer with a \$20.00 debit card after successful enrollment, selection and completion of the on-line demographic survey. The Company will provide the Customer with a \$100.00 debit card at the end of the Program Period subject to the Customer terms described below. The Company may provide additional incentives throughout the TOU Pilot Program Period at no cost to the Customer.

The Customer hereby: 1.) agrees to provide access to and grant the Company, its employees and/or their contractors the right to install, read, remove, repair and inspect the meter as necessary to measure electric usage at the Customer's residential address defined by the Customer; 2.) agrees not to harm, damage or interfere with the meter equipment so as to ensure continuous and accurate data acquisition and to notify the Company of any known damage to the equipment; 3.) agrees to continue to take electric supply from the Company during the Program Period; 4.) agrees to remain in the TOU Pilot for the entire Program Period; 5.) agrees to participate in focus groups, web-based surveys, telephone surveys and to complete and return to the Company responses to written TOU Pilot surveys when such surveys are provided by the Company; 6.) understands that to participate in the TOU Pilot, the Customer's electric service account must remain current with no outstanding amount due; 7.) understands that they may be removed from the TOU Pilot upon notice from the Company for failure to comply with items 1-6 and the Customer will not be entitled to or eligible for any future incentives the Company may have offered for participating in the TOU Pilot; 8) understands that the Customer will not be entitled to or eligible for any incentives the Company may have offered if the Customer voluntarily departs from the TOU Pilot; 9.) understands that a reduction in their electric bill is not guaranteed by participating in the TOU Pilot; and 10.) agrees to and understands that the Company is not responsible for any consequences of any increases in the Customer's monthly bill that are due to the Customer's timing of electricity consumption patterns.

This Agreement shall be in effect for the Program Period commencing on the date of enrollment by the Customer in the TOU Pilot and terminate on or about December 1, 2012, unless otherwise agreed, extended, or terminated. This Agreement is subject to approval and modification by the Pennsylvania Public Utility Commission ("PaPUC").



# **Pilot Program Descriptions**

## Smart Sense Pilot Program Descriptions Posted on Web Site

### Pilot Program Descriptions

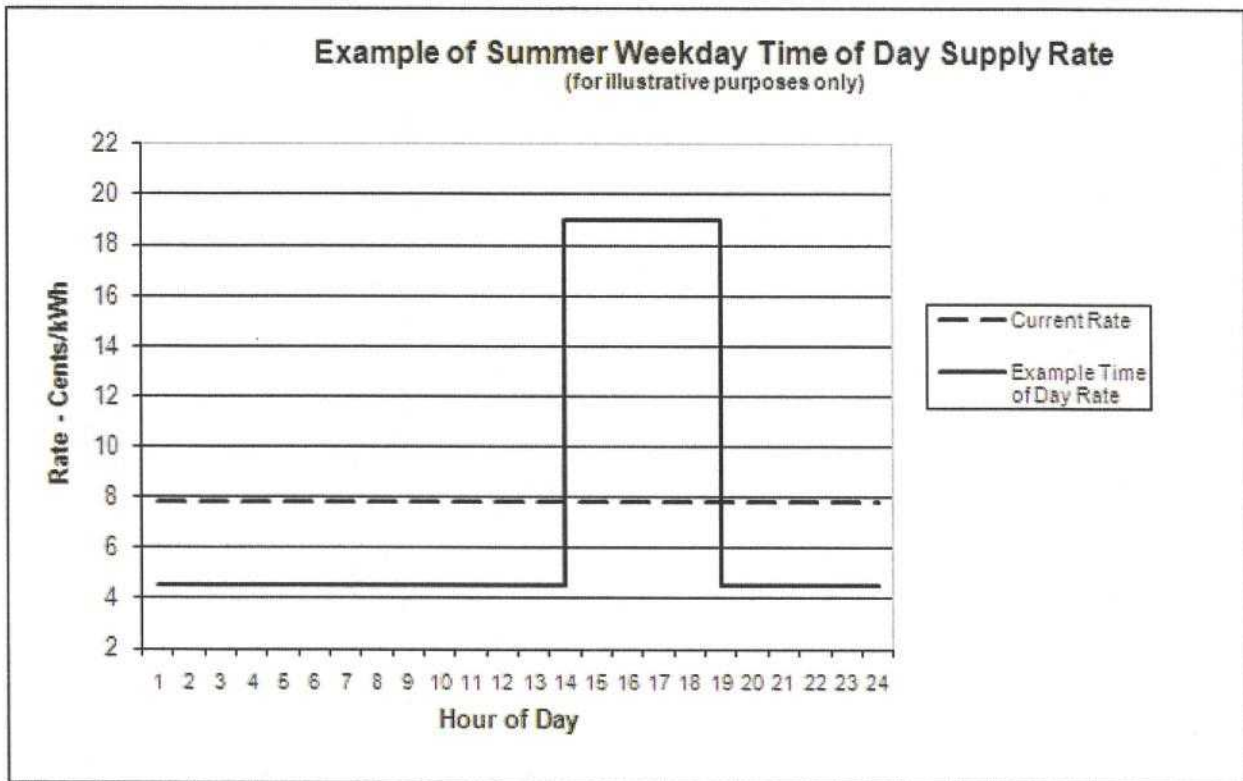
The goal of our Smart Sense Pilot Program is to use your input to help us develop a smart-meter system and time-of-day rates that will benefit all Duquesne Light customers. At the same time, we also would like to enhance your understanding of your daily electricity use. With that in mind, we have developed two pilot programs. They will run from May 2011 through November 2012.

**Time-of-Week Pilot Program** — This pilot will evaluate your ability to reduce your electricity use on weekdays during the summer of 2012. In 2011, we'll be collecting your baseline electricity use data, for comparison. The only action needed on your part in this first phase of the pilot will be periodic on-line or telephone surveys and -- for some participants -- focus groups. Later this fall, we will provide a variety of free energy-saving products and tips for you to put into use. Then, in the summer of 2012, we'll see how you have responded to these free products and ideas. As an added incentive, customers who reduce their 2012 electricity use by at least 10 percent (10%) in the months of June, July and/or August below their 2011 baseline kilowatt-hour usage will receive an additional 10 percent (10%) incentive credit on the supply charge portion on their bill for those months.\* In other words, if you reduce your 2012 electricity usage by at least 10 percent (10%) in any or all of those months, not only will you save money by reducing your usage, we will credit you for doing so. As an example:

Time-of-Week Pilot Program Example				
Monthly Electricity Use				
	June 2011	June 2012	June 2012 Savings	June 2012 % Savings
Kilowatt-hour (kWh)	1000	900	100	10%
Supply Charge - ¢ per kWh	7.86	7.86		
	\$78.60	\$70.74		
Supply Charge	\$78.60 - \$70.74 =		\$7.86	
Smart Sense Pilot Program Incentive Credit	\$70.74 x 10% =		\$7.07	
Net June 2012 Savings	\$7.86 + \$7.07 =		\$14.93	

## Smart Sense Pilot Program Descriptions Posted on Web Site

**Time of Day Pilot** — This pilot will evaluate your response to electricity supply rates that are based on the time-of-day and day-of-week. Like the time-of-week pilot program, we'll be collecting your baseline electricity usage data in 2011, for comparison. And, the only action needed on your part in this first phase of the pilot will be periodic on-line or telephone surveys and -- for some participants -- focus groups. Also, later this fall, we'll be sending you free energy-saving products and tips. Then, for the months of June, July and August of 2012, we'll evaluate how you respond to electric supply rates that are designed based on the time-of-day, benefitting those who shift their usage from peak periods to non-peak periods. For example, we may offer a higher supply rate from 2 p.m. to 7 p.m. on weekdays, the peak period of energy usage, and a lower supply rate for all other weekday hours and on weekends. Please note that there is no guarantee of savings on your electric bill as part of this program. Customers must actively participate and be willing and able to shift their peak weekday usage in 2012 in order to potentially benefit from this pricing program. Since we need to submit the supply rates to the Pennsylvania Public Utility Commission for approval, the specifics of the time-of-day pilot program, including peak and off-peak supply rate options, will not be available until January 2012. The time-of-day pilot program is limited to about 100 customers because of the nature of the equipment required.\*\*



\*Incentive bill credits may take up to two full billing cycles to be processed.

\*\*The equipment for the pilot will be an Alpha electronic meter capable of recording and storing energy consumption in hourly intervals and transmitting it back to Duquesne Light Company. You do not need to be at home when the equipment is installed. A brief outage will be required to install this equipment. We apologize for any inconvenience this may cause.

## **FAQs**

## Duquesne Light Company's Smart Sense Pilot Program FAQs

- [General](#)
- [Participation Requirements](#)
- [Registration](#)
- [Enrollment](#)
- [Compensation](#)
- [Surveys](#)
- [Equipment](#)
- [Miscellaneous](#)

### General

#### - Why is Duquesne Light conducting a Smart Sense Pilot Program?

The program is being offered to meet the requirements of Pennsylvania's Act 129 legislation, which called for electric distribution companies with at least 100,000 customers to file a time-of-use and real-time pricing plan.

#### - What is the goal of the Smart Sense program?

The goal of the Smart Sense program is to obtain and use your input to assist us in developing a smart-meter system and time-of-day rates that will benefit all customers.

#### - What is the concept behind time-of-day and time-of-week rates?

During certain times of the day and year, electric customers use more power than at other times. Those periods with heavier usage are called "peak" hours. For Duquesne Light, the peak load occurs in the afternoon during the summer months. During these peak hours, utilities must run higher-cost, less-efficient generating facilities to meet consumer demand. Typically, utilities bill customers based on how much electricity they use, regardless of when they use it. Participants in Duquesne Light's Smart Sense program will have the potential to save money by shifting their energy use away from higher cost, on-peak hours to lower cost, off-peak hours. Doing this will ultimately help utilities pass on cost savings from these efforts to customers.

#### - Why did I get an offer to participate in the Smart Sense Pilot Program?

Based on the amount of electricity you used during peak summer months in 2010, we believe you would be a good candidate to benefit from participation in this program.

[Back to Top](#)

### Participation Requirements

#### - Do I need to stay in the Smart Sense pilot the entire 18 months?

Yes. While no action is needed on your part during the first phase of the program in 2011, your **active** participation is needed during June, July and August of 2012. Additionally, we will be asking you to take part in various surveys and/or focus groups throughout the duration of the pilot. As a result, we are requesting that customers agree to participate for the full 18 months.

#### - If I'm selected to participate in the Smart Sense pilot program, will I need to do anything the first year?

During the first year of the pilot, we will be collecting your electric usage data. Your supply rate will not change and nothing needs to change in regard to how or when you use electricity. We want you to do what you normally do. We do not want you to alter your usage during the first year as we will use this information as a baseline for comparison with the second year. You **will** be asked to complete surveys and/or participate in focus groups so that we can obtain your ideas and feedback on how Duquesne Light can develop a smart-meter system and time-of-day rates that will benefit all customers.

#### - If I'm selected to participate in Duquesne Light's Smart Sense pilot program, will I need to do anything the second year?

Yes. During the second year of the pilot, you will need to be an **active** participant in regard to either reducing your electric usage or shifting your electric usage from on-peak time periods to off-peak time periods. **You will need to take action to achieve energy savings.**

[Back to Top](#)

## Registration

### - Why do I have to register on Duquesne Light's website before signing up for Smart Sense?

For your protection and privacy, all customers who plan to provide or access account information (paying their bill, stop or start service, etc.) must create a unique login to the Duquesne Light website. We want to provide that same protection to Smart Sense participants.

### - Why do I have to agree to two different Terms and Conditions?

The Terms and Conditions that you are agreeing to on the Duquesne Light website are specific to using the Duquesne Light Company website. The Terms and Conditions that you are agreeing to on the Smart Sense portion of the website are specific to the pilot program.

### - How long will it take me to complete the Duquesne Light website registration process?

It should take you approximately five (5) minutes to register. You will need to have your bill available to find your account number and meter number.

### - How long will it take me to sign-up for Smart Sense?

It should only take you a few minutes to enroll in Smart Sense. If you are already a registered user on the Duquesne Light website, you will only have to sign-up for Smart Sense. If you are not a registered user, you will need to have your bill available to find your account number and meter number in order to register on the Duquesne Light website prior to your enrollment in Smart Sense.

[Back to Top](#)

## Enrollment

### - How will I know if I have been selected as a participant in Smart Sense?

You will receive an e-mail after signing-up for Smart Sense that will confirm your acceptance into the program. If you do not receive this confirmation email, please check your junk/spam folder and look for an email from donotreply@duqlight.com. To ensure you receive all future emails from the Smart Sense Team, please add donotreply@duqlight.com and smartsense@duqlight.com to your contacts list in the address book of your email software.

### - What happens after I am enrolled?

Once you are enrolled in Smart Sense, you will be asked to complete a Demographic Survey. The Survey must be completed in order for you to receive your \$20 pre-paid debit card. In addition, we will be asking you to take part in various surveys and/or focus groups throughout the duration of the pilot.

### - I received an offer to sign-up for Smart Sense but wasn't selected. Why?

The program is on a first come, first served basis and there were a limited number of slots available.

[Back to Top](#)

## Compensation

### - Will I be compensated for my participation in the program?

Yes. By agreeing to participate for the full 18 months of the program, you will receive a total appreciation payment of **\$120** and a variety of free energy-conservation information and products.

### - When will I receive my \$20 pre-paid debit card?

You will receive your \$20 pre-paid debit card in 4-6 weeks after your successful completion of the enrollment requirements and demographic survey.

### - When will I receive my \$100 pre-paid debit card?

You will receive your \$100 pre-paid debit card in November 2012 after your successful completion of the entire 18-month Smart Sense program.

### - Who do I contact with questions about the pre-paid debit card?

If you have any questions in regard to the pre-paid debit card or to check on the status of your card, please e-mail us at [smartsense@duqlight.com](mailto:smartsense@duqlight.com) with "Pre-Paid Debit Card" in the subject line. We ask that you do allow 4 - 6 weeks **after** your successful completion of the enrollment requirements and demographic survey before contacting us.

[Back to Top](#)

## Surveys

### - How long will it take me to complete the Demographic Survey?

It should only take you a few minutes to complete the Demographic Survey. Please keep in mind that the questions should be answered by or about the **Head of Household**.

### - How often will I be asked to do surveys?

We have not finalized our plans for surveys. However, we anticipate the electronic surveys will take less than 10 minutes to complete and likely occur on a quarterly basis.

[Back to Top](#)

## Equipment

### - If I am selected to receive new equipment, who will do the work?

A Duquesne Light Company meter technician will remove your current equipment and replace it with new equipment. We will not be using non-Duquesne Light Company employees to install the equipment.

### - How will I know that the person coming to my home to replace my equipment is a Duquesne Light employee?

The meter technician will arrive in a vehicle with a Duquesne Light Company logo and the employee will wear a uniform having Duquesne Light Company appearing on their shirt. In addition, the meter technician will carry a Duquesne Light Company ID card.

### - What is the name of the new equipment being installed at my home and how is it different from my current equipment?

The equipment is an Alpha electronic meter capable of recording and storing energy consumption in hourly intervals. The twenty-four hourly intervals are electronically transmitted back to Duquesne Light Company once per day. Your existing equipment does not have the capability to record consumption in intervals.

### - Is the new equipment that you are installing at my home a Smart Meter?

No. The Alpha electronic meter is not a smart meter.

### - Will the new equipment that you are installing at my home interfere with any of my home equipment?

No. The new equipment will not cause any interference with your home equipment.

### - If I am selected to receive new equipment, do I need to be home to have it installed?

No. The Duquesne Light Company meter technician is able to perform all necessary work without entry into your home.

### - Will I experience an outage during the installation of the new equipment?

Yes. You will experience a short power interruption when the existing equipment is removed. We apologize for any inconvenience this may cause.

### - How will I know if my current equipment has been replaced with new equipment?

Duquesne Light Company will notify you by e-mail prior to when your equipment is scheduled for replacement. In addition, after the work has been completed, the meter technician will leave a door hanger indicating that the work is complete and the Smart Sense Team will follow-up with an e-mail.

[Back to Top](#)

## Miscellaneous

### - What will you do with the data that you collect?

We only will use the data that we have collected from you for internal analysis and for required Pennsylvania Public Utility Commission (PaPUC) reports. The data will be used in an aggregate form so that any identifying and/or personal information will not be disclosed. Please see our [Privacy Policy](#).

### - If I move, will I need to drop out?

If you leave Duquesne Light's service territory or move to a non-qualifying place of residence, then, yes, you will have to drop out of the Smart Sense pilot. However, if you move to a qualifying place of residence within Duquesne Light's service territory, we will evaluate your relocation. Dependent on that evaluation, you may be able to stay in the program. Duquesne Light is the only party that has the authority to make that decision.

### - What happens if I need to withdraw from the program?

We do understand that, due to certain circumstances, you may need to withdraw from the program. Simply send an e-mail to us at [smartsense@duqlight.com](mailto:smartsense@duqlight.com) explaining your request and we will follow-up with you within three (3) business days. Please note that once you have withdrawn from the program, you no longer will be eligible for additional appreciation payments or free energy-conservation information and products.

### - Where can I find a copy of Duquesne Light's Time-of-Use and Real Time Pricing Plan?

Duquesne Light's Time-of-Use and Real Time Pricing Plan.

### - Additional Questions

If you didn't find your question in this list, please send it to [smartsense@duqlight.com](mailto:smartsense@duqlight.com)

[Back to Top](#)



# **Screening Criteria**

**Duquesne Light Company**  
**Time-of-Use Pilot Programs**  
**Customer Eligibility Criteria**

In compliance with Act 129, the Company is developing two (2) pilot programs utilizing the capability of current infrastructure.

**Time of Week (TOU-1):**

1. Applicable to 1,000 POLR customers, week days, in the months of June, July and August.
2. Customers who reduce their baseline kWh usage by 10% (as an example) will receive an additional 10% (as an example) incentive credit on their bill.

**Time of Day (TOU-2):**

1. Applicable to 100 POLR customers, week days, in each month of June, July and August.
2. TOU rates applicable only to supply portion of charges.
3. This pilot will evaluate customer response to supply prices that vary by time of day.

---

**Customer Eligibility Criteria – Directly mass market these customers.**

- POLR customers
- Rate Schedules RS, RH and RA
- Use at least 750 kWh or more in each month of June, July or August
  - Use 2010 as base.
- Single Family Homes, Townhomes, Patio Homes, Condominiums
- Home Owner/Occupant – No Renters
  - Service must be in applying parties' name and he/she must show proof of residency.
- Permanent central air conditioner unit and/or heat pump with air conditioning cycle
- No CAP customers
- No accounts in arrears
- No frequent movers (as indicated by account suffix and service dates)
- Payment assistance customers are eligible
- Employees are eligible

# **Demographic Survey**

## Demographic Survey

Demographic information for classification purposes. The answers and information given in response to the questions should be about the HEAD OF HOUSEHOLD at this residence.

### 1) What is your gender?

- Male
- Female

### 2) What is your age?

- 18 - 25
- 26 - 35
- 36 - 45
- 46 - 55
- 56 - 65
- Over 66 years of age

### 3) What is your marital status?

- Single
- Married
- Divorced
- Widow/Widower
- Other

### 4) How would you describe your race?

- American Indian / Native American
- Asian
- Black / African American
- Hispanic / Latino
- White / Caucasian
- Other

### 5) What is the highest level of education that you've completed?

- Completed high school (received diploma)
- Trade/Technical/Business school
- Some college, but no degree
- College degree
- Graduate Degree
- Other

6) How would you describe your current employment status? (Please check all that may apply.)

- Employed full time
- Employed part time
- Unemployed
- Full time student
- Part time student
- Homemaker
- Retired
- Other

7) What is your household's total annual income for 2010?

- Less than \$50,000
- \$50,000 - \$100,000
- \$100,000 - \$200,000
- Over \$200,000

8) Do you live in a:

- Ranch
- Two-story
- Multi-Level
- Condo
- Other

9) What year was your home built?

- Before 1950
- 1950 - 1979
- 1980 - 1999
- 2000 or newer

10) How long have you lived at this residence?

- < 5 years
- 5 - 10 years
- > 10 years

11) Including you, how many people live in your home? (Please select an answer from each drop down list below.)

- Number of Adults (18 years of age and older):

Select an Answer ▼

- Number of Children (1 - 5 years of age)

Select an Answer ▼

- Number of Children (6 - 10 years of age)

Select an Answer ▼

- Number of Children (11 - 17 years of age):

Select an Answer ▼

12) What is your home's square footage of living space?

- < 1000
- 1000 - 2500
- > 2500
- Don't know

13) How many rooms does your home have? Please count living areas and bath rooms, but skip closets and hallways. (Please select an answer from each drop down list below.)

• **Number of bedrooms**

Select an Answer ▼

• **Number of full bathrooms**

Select an Answer ▼

• **Number of partial bathrooms**

Select an Answer ▼

• **Garage**

Select an Answer ▼

• **Please check all that apply:**

- Living room
- Dining Room
- Kitchen
- Family Room
- Den/Library/Office
- Finished basement
- Unfinished basement
- Sun Room
- All season room
- Attic

14) Do you use any of the following equipment on a daily basis:

Electronics	Used Daily?				When not in use, is your equipment:		
	Yes	No	Occasionally	Never	Always on	In stand-by	Shut down
Computer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Printer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Copier	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scanner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facsimile Machine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15) Do you have an attic fan?

- Yes  
 No

16) Are there ceiling fans installed in your home?

- Yes  
 No

17) Do you have an electric hot water heater?

- Yes  
 No

18) Do you have an electric clothes dryer?

- Yes  
 No



19) Do you have a dishwasher?

- Yes
- No

20) Do you have any window A/C units?

- Yes
- No

21) Is there a programmable thermostat installed at your home?

- Yes
- No

22) Do you have any of the following:

	Heated?		Heating Source:					
	Yes	No	Yes	No	Electric	Gas	Propane	Other
<b>Swimming Pool</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Jacuzzi/Hot Tub</b>	<input type="radio"/>	<input type="radio"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Sauna/Steam Room</b>	<input type="radio"/>	<input type="radio"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23) How many permanent A/C units do you have?

Select an Answer ▼

• Age of A/C unit No. 1.

Select an Answer ▼

• Age of A/C unit No. 2.

Select an Answer ▼

• Age of A/C unit No. 3.

Select an Answer ▼

• Do you plan to purchase a new permanent A/C unit within the next \_\_\_\_ year(s)?

Select an Answer ▼

24) How many heat pumps do you have?

Select an Answer ▼

• Age of your heat pump No. 1.

Select an Answer ▼

• Age of your heat pump No. 2.

Select an Answer ▼

• Age of your heat pump No. 3.

Select an Answer ▼

• Do you plan to purchase a new heat pump within the next \_\_\_\_ year(s)?

Select an Answer ▼

# **Attachment 7**

**Smart Sense Web Site Screen Shots**

# **Smart Sense Pilot Program Enrollment Process**

## Smart Sense Enrollment Home Page

Solicited customers were directed to ([www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)) which is the Smart Sense Pilot Program web site. Once there, they could click on one of the buttons depending upon what they wanted to do.

The screenshot shows a Windows Internet Explorer browser window displaying the Duquesne Light Smart Sense Enrollment Home Page. The browser's address bar shows the URL <http://secure-d.dqe.com/dlx/TouPilot/default.cfm>. The page features the Duquesne Light logo with the tagline "Our Energy... Your Power" and a search bar. A navigation menu includes links for Home, Customer Services, Our Community, Storm Center, News, About Us, and Contact Us. The main content area is a promotional banner for the Smart Sense program, featuring a woman holding a clock and a man smiling. The banner text reads: "Smart Sense SAVE ENERGY. SMART! Be part of a pilot program that will help us develop a smart-meter system with time-of-day rates that will benefit all customers." Below the banner are three buttons: "Sign Up Now", "Already Enrolled", and "More Info Please". The browser's status bar at the bottom shows "Local intranet | Protected Mode: Off" and the system clock displays "2:44 PM 11/4/2011".

## Smart Sense Pilot Program Enrollment Process

Customer clicked on the "More Info Please" button. At this screen, customer could click on any of the hot links under "Learn More About the Program." The customer also had the option of enrolling from this page if they decided they wanted to after reading the additional material.

The screenshot shows a web browser window titled "Welcome to Duquesne Light's Smart Sense Program - Windows Internet Explorer". The address bar shows the URL: <http://secure-d.dqe.com/dlx/TouPilot/default.cfm?page=home>. The browser interface includes a search bar with the text "SEARCH" and a "GO" button. The navigation menu contains links for Home, Customer Services, Our Community, Storm Center, News, About Us, and Contact Us. The main content area features the Duquesne Light logo with the tagline "Our Energy...Your Power".

### Welcome to Duquesne Light's Smart Sense Pilot Program

Thank you for your interest in signing up for Duquesne Light's Smart Sense pilot program, designed to help customers better understand and manage their electricity costs by reducing or shifting their usage during days when demand is the highest.

The goal of the Smart Sense pilot program is to help us to develop a smart-meter system and time-of-day rates that will benefit all customers. By agreeing to participate for the full 18 months of the pilot program, you will receive:

- a total appreciation payment of \$120
- a variety of free energy-conservation information and products
- a better understanding of your electric usage

In addition, you may save money on your monthly bill as a result of changes you decide to make in how you use electricity in your home.

We encourage you to be part of the Smart Sense pilot program. Your participation will help us develop a key component in the Pittsburgh region's energy future.

#### Learn More About the Program

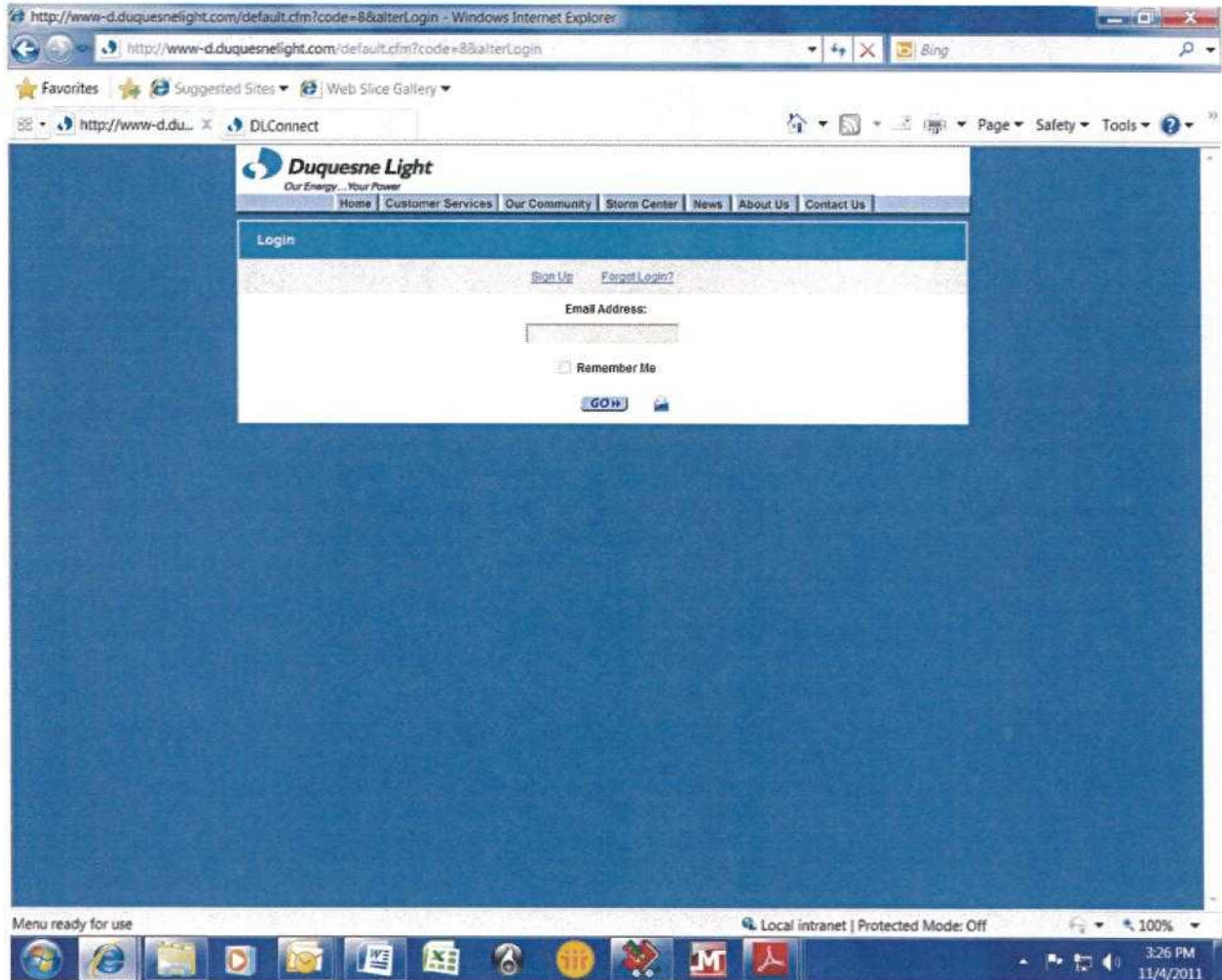
- [Review our privacy policy](#)
- [Read our participation agreement](#)
- [Pilot program description](#)
- [What you will need to sign up](#)
- [Invitation Letter](#)
- [Brochure](#)
- [Frequently Asked Questions](#)

At the bottom of the page, there are two buttons: "Sign Up Now" and "Already Enrolled". The browser's status bar at the bottom shows "Done", "Local intranet | Protected Mode: Off", and the system clock indicating 3:21 PM on 11/4/2011.



## Smart Sense Pilot Program Enrollment Process

Once the customer clicked on the "Sign Up Now" button, if they were already registered on the Duquesne Light Company web site ([www.duquesnelight.com](http://www.duquesnelight.com)), they were directed to enter their e-mail address.





## Smart Sense Pilot Program Enrollment Process

Once the customer clicked on the "Sign Up Now" button, if they were not already registered on the Duquesne Light Company web site ([www.duquesnelight.com](http://www.duquesnelight.com)), they were directed to register their account.

The screenshot shows a web browser window displaying the Duquesne Light Account Registration page. The browser's address bar shows the URL: <http://secure-d.dqe.com/dlx/CodeIncludes/Registration/accountregistration.cfm>. The page features the Duquesne Light logo and a navigation menu with links for Home, Customer Services, Our Community, Storm Center, News, About Us, and Contact Us. The main content area is titled "Account Registration" and includes the following sections:

- Account Registration**
  - To access our online services, you'll need to register an account with us.
  - Duquesne Light will not share your information. You may wish to view our [terms of use](#).
- Email-**
  - Email address
  - Re-enter Email Address
- Personal Information-**
  - First Name
  - Last Name
  - M.I.
  - Address 1
  - Address 2
  - City
  - State
  - Zip
  - Phone Number ( ) -
- Secret Question-**
  - Question
  - Answer
- Create Password-**
  - Password
  - Re-enter Password
- Terms & Conditions-**
  - To continue, you must agree to these [website terms and conditions](#).

At the bottom of the form, there are "Sign Up" and "Cancel" buttons. The footer of the page includes links for Terms of Use, Site Map, Site Help, and Copyright 2007. The browser's taskbar at the bottom shows the system tray with the date and time: 3:29 PM, 11/4/2011.

## Smart Sense Enrollment Process - Step 2



SEARCH

GO

[Home](#)

[Customer Services](#)

[Our Community](#)

[Storm Center](#)

[News](#)

[About Us](#)

[Contact Us](#)

[Profile Information](#) | [Log Out](#)

### Sign Up Now

Please read the Smart Sense program's terms and conditions below and click the checkbox to indicate your acceptance. You'll then move on to the sign-up area.

#### Smart Sense Pilot Program Terms & Conditions

This Customer Participation Agreement ("Agreement") is made by and between the Duquesne Light Company ("Company") and the Customer ("Customer") for participation in one of the Company's Residential Service Time-of-Use ("TOU Pilot") programs. These TOU Pilot programs are part of the Company's "Smart Sense" program.

Enrollment in each TOU Pilot will be determined by the Company. After enrollment, the Company will request the customer's pilot preference. The Company will notify the customer by e-mail and let them know which pilot they were selected to participate in. The Company will make every effort to place a

I agree to the above terms

Account Number:

Name on Account:

Address:

Daytime Telephone Number: \*  (  )  -

Alternate Telephone Number:  (  )  -

Email Address: \*

Retype Email Address: \*

Do you live in a: \*

Single family home  Townhouse  Condominium  Other

Do you own or rent your home? \*


Own  Rent

Do you have a central air conditioning unit or heat pump? \*

Yes  No

\* = Required Field

## Smart Sense Enrollment Process - Step 3



**Duquesne Light**  
Our Energy...Your Power

[Home](#) | [Customer Services](#) | [Our Community](#) | [Storm Center](#) | [News](#) | [About Us](#) | [Contact Us](#)

[Profile Information](#) | [Log Out](#)

---

### Verify Your Information

If any information below is incorrect, please click the "Back" button to return to the previous page.

Pursuant to the Company's TOU Pilot, the Company offers an optional residential electricity service. If applicable, a new meter will be installed at the Customer's location that allows the Customer to pay for electricity based on the time of day it is used. Upon entering into this Agreement with the Company to utilize the TOU Pilot, the current meter will be replaced by the Company with a meter and equipment that records hourly electricity usage during multiple time periods. Under this Agreement, the Company agrees to pay all costs directly associated with the purchase, installation and routine maintenance of the new meter.

I agree to the above terms

**Account Number:**

**Name on Account:**

**Address:**

**Daytime Telephone Number:**

**Email Address:**


**Do you live in a: \***  
Single family home

**Do you own or rent your home? \***  
Own

**Do you have a central air conditioning unit or heat pump? \***  
Yes

[Terms of Use](#) | [Site Map](#) | [Site Help](#) | © Copyright 2007

## Smart Sense Enrollment Process - Step 4 Not Addressed Customers



**Duquesne Light**  
Our Energy...Your Power

SEARCH

[Home](#) | [Customer Services](#) | [Our Community](#) | [Storm Center](#) | [News](#) | [About Us](#) | [Contact Us](#)

[Profile Information](#) | [Log Out](#)

---

### Thank You

Thank you for signing up for the Smart Sense pilot program. You will receive an email confirming your enrollment status and noting next steps. Duquesne Light appreciates your interest in helping us create this important component of Pittsburgh's energy future.

[Click here](#) to go to the Smart Sense home page.

[Terms of Use](#) | [Site Map](#) | [Site Help](#) | © Copyright 2007

**Smart Sense Pilot Program  
Auto Accepted**

Welcome to Duquesne Light's Smart Sense Program - Windows Internet Explorer  
http://secure-d.dqe.com/dla/YouPilot/default.cfm/pages/thankyou

Home Customer Services Our Community Storm Center News About Us  
Contact Us

lcomis@duquesnelight.com's view: Home: 8000-904-648-002 Profile Information | Log Out

### Thank You

Thank you for signing up for the Smart Sense pilot program. You will receive an email confirming your enrollment.

Your next step is to complete the [Demographic Survey](#) found on the ["What We Hear from You"](#) page. Please note the survey must be completed in order for you to receive your first incentive, the \$20 pre-paid debit card.

Duquesne Light appreciates your interest in helping us create this important component of Pittsburgh's energy future.

[Click here](#) to go to the Smart Sense home page.

[Terms of Use](#) | [Site Map](#) | [Site Map](#) | © Copyright 2007

Done Local intranet | Protected Mode: Off 100% 3:48 PM 3/10/2011

Welcome to Duquesne Light's Smart Sense Program - Windows Internet Explorer  
http://secure-d.dql.com/dls/TooPilot/default.cfm?page=dashboard

Home Customer Services Our Community Storm Center News About Us  
Contact Us

lcomba@dqlight.com's view: Home: 8000-984-548-002 Profile Information | Log Out

### Duquesne Light's Smart Sense Program

Home	What We Need from You <b>Action</b> <a href="#">Complete Demographic Survey</a>
<b>What We Need from You</b>	
Frequently Asked Questions	
Contact Us	

Terms of Use | Site Map | Site Help | © Copyright 2007

Done Local intranet | Protected Mode: Off 3:49 PM 3/10/2011



## Welcome to Duquesne Light's Smart Sense Pilot Program

<a href="#">Home</a>
<a href="#">What We Need from You</a>
<a href="#">Frequently Asked Questions</a>
<a href="#">Contact Us</a>

You are enrolled in the Smart Sense Pilot Program.

Thank you for enrolling in Duquesne Light's Smart Sense pilot program, designed to help customers better understand and manage their electricity costs by reducing or shifting their usage during days when demand is the highest.

The goal of the Smart Sense pilot program is to help us to develop a smart-meter system and time-of-day rates that will benefit all customers. By agreeing to participate for the full 18 months of the pilot program, you will receive:

- a total appreciation payment of \$120
- a variety of free energy-conservation information and products
- a better understanding of your electric usage

In addition, you may save money on your monthly bill as a result of changes you decide to make in how you use electricity in your home.

Thanks again for taking part in the Smart Sense Pilot Program. Your participation will help us develop a key component in the Pittsburgh region's energy future.

### Learn More About the Program

- [Review our privacy policy](#)
- [Read our participation agreement](#)
- [Pilot program descriptions](#)
- [What you will need to sign up](#)
- [Invitation Letter](#)
- [Brochure](#)
- [Frequently Asked Questions](#)



**Smart Sense Pilot Program  
Non-Auto Accepted**



SEARCH

- Home
- Customer Services
- Our Community
- Storm Center
- News
- About Us
- Contact Us

hcombs@duqlight.com's view: Home: 8000-984-648-002

[Profile Information](#) | [Log Out](#)

### Thank You

Thank you for signing up for the Smart Sense pilot program. You will receive an email confirming your enrollment status and noting next steps. Duquesne Light appreciates your interest in helping us create this important component of Pittsburgh's energy future.

[Click here](#) to go to the Smart Sense home page.



SEARCH

kscomis@duquelight.com's view: Home: 8000-384-648-002

Profile Information | Log Out

## Welcome to Duquesne Light's Smart Sense Pilot Program

Thank you for your interest in Duquesne Light Company's Smart Sense Pilot Program. We will contact you shortly in regard to your enrollment.

Thank you for your interest in Duquesne Light's Smart Sense pilot program, designed to help customers better understand and manage their electricity costs by reducing or shifting their usage during days when demand is the highest.

The goal of the Smart Sense pilot program is to help us to develop a smart-meter system and time-of-day rates that will benefit all customers. By agreeing to participate for the full 18 months of the pilot program, you will receive:

- a total appreciation payment of \$120
- a variety of free energy-conservation information and products
- a better understanding of your electric usage

In addition, you may save money on your monthly bill as a result of changes you decide to make in how you use electricity in your home.

Thanks again for your interest. We will contact you shortly in regard to your enrollment. Your participation will help us develop a key component in the Pittsburgh region's energy future.

### Learn More About the Program

- [Review our privacy policy](#)
- [Read our participation agreement](#)
- [Pilot program descriptions](#)
- [What you will need to sign up](#)
- [Invitation Letter](#)
- [Brochure](#)
- [Frequently Asked Questions](#)

**Smart Sense Pilot Program  
Alternate (Waiting List) Home Page**

## Smart Sense Web Site Home Page — Alternate (Waiting List) Customer

### Welcome to Duquesne Light's Smart Sense Pilot Program

Thank you for your interest in Duquesne Light Company's Smart Sense Pilot Program. Due to strong customer response, the program currently is full. We have placed you on a waiting list and will contact you if there is an opening.

If you have any questions, please contact us at [smartsense@duqlight.com](mailto:smartsense@duqlight.com).

Thank you for your interest in Duquesne Light's Smart Sense pilot program, designed to help customers better understand and manage their electricity costs by reducing or shifting their usage during days when demand is the highest.

The goal of the Smart Sense pilot program is to help us to develop a smart-meter system and time-of-day rates that will benefit all customers. By agreeing to participate for the full 18 months of the pilot program, you will receive:

- a total appreciation payment of \$120
- a variety of free energy-conservation information and products
- a better understanding of your electric usage

In addition, you may save money on your monthly bill as a result of changes you decide to make in how you use electricity in your home.

Thanks again for your interest. We will contact you shortly in regard to your enrollment. Your participation will help us develop a key component in the Pittsburgh region's energy future.

#### Learn More About the Program

- [Review our privacy policy](#)
- [Read our participation agreement](#)
- [Pilot program descriptions](#)
- [What you will need to sign up](#)
- [Invitation Letter](#)
- [Brochure](#)
- [Frequently Asked Questions](#)

**Smart Sense Pilot Program  
Ineligible Customer**

## Smart Sense Web Site Home Page — Ineligible Customer

### Welcome to Duquesne Light's Smart Sense Pilot Program

Thank you for your interest in Duquesne Light Company's Smart Sense Pilot Program. However, since our records indicate that you do not meet one or more of the eligibility requirements, you have been removed from the program.

If you have any questions, please contact us at [smartsense@duqlight.com](mailto:smartsense@duqlight.com).

Thank you for your interest in Duquesne Light's Smart Sense pilot program, designed to help customers better understand and manage their electricity costs by reducing or shifting their usage during days when demand is the highest.

The goal of the Smart Sense pilot program is to help us to develop a smart-meter system and time-of-day rates that will benefit all customers. By agreeing to participate for the full 18 months of the pilot program, you will receive:

- a total appreciation payment of \$120
- a variety of free energy-conservation information and products
- a better understanding of your electric usage

In addition, you may save money on your monthly bill as a result of changes you decide to make in how you use electricity in your home.

Thanks again for your interest. We will contact you shortly in regard to your enrollment. Your participation will help us develop a key component in the Pittsburgh region's energy future.

#### Learn More About the Program

- [Review our privacy policy](#)
- [Read our participation agreement](#)
- [Pilot program descriptions](#)
- [What you will need to sign up](#)
- [Invitation Letter](#)
- [Brochure](#)
- [Frequently Asked Questions](#)

**Smart Sense Pilot Program  
No Demographic Survey**



# Smart Sense Web Site Home Page – Did Not Complete Demographic Survey

## Welcome to Duquesne Light's Smart Sense Pilot Program

Thank you for your interest in Duquesne Light Company's Smart Sense Pilot Program.

As noted in the program information, one of the enrollment requirements was to complete a Demographic Survey. We recently sent you a follow-up email asking you to complete the survey by April 1. Our records show that you have not done so. As a result, you have been removed from the program.

If you have any questions, please contact us at [smartsense@duqlight.com](mailto:smartsense@duqlight.com).

Thank you for your interest in Duquesne Light's Smart Sense pilot program, designed to help customers better understand and manage their electricity costs by reducing or shifting their usage during days when demand is the highest.

The goal of the Smart Sense pilot program is to help us to develop a smart-meter system and time-of-day rates that will benefit all customers. By agreeing to participate for the full 18 months of the pilot program, you will receive:

- a total appreciation payment of \$120
- a variety of free energy-conservation information and products
- a better understanding of your electric usage

In addition, you may save money on your monthly bill as a result of changes you decide to make in how you use electricity in your home.

Thanks again for your interest. We will contact you shortly in regard to your enrollment. Your participation will help us develop a key component in the Pittsburgh region's energy future.

### Learn More About the Program

- [Review our privacy policy](#)
- [Read our participation agreement](#)
- [Pilot program descriptions](#)
- [What you will need to sign up](#)
- [Invitation Letter](#)
- [Brochure](#)
- [Frequently Asked Questions](#)

**Smart Sense Pilot Program  
Pilot Full Message**

## Smart Sense Web Site Home Page – Pilot Full Message

---

### Welcome to Duquesne Light's Smart Sense Pilot Program

---

Due to strong customer response, the Smart Sense pilot is full.

Thank you for your interest in signing up for Duquesne Light's Smart Sense pilot program, designed to help customers better understand and manage their electricity costs by reducing or shifting their usage during days when demand is the highest.

The goal of the Smart Sense pilot program is to help us to develop a smart-meter system and time-of-day rates that will benefit all customers. By agreeing to participate for the full 18 months of the pilot program, you will receive:

- a total appreciation payment of \$120
- a variety of free energy-conservation information and products
- a better understanding of your electric usage

In addition, you may save money on your monthly bill as a result of changes you decide to make in how you use electricity in your home.

We encourage you to be part of the Smart Sense pilot program. Your participation will help us develop a key component in the Pittsburgh region's energy future.

#### Learn More About the Program

- [Review our privacy policy](#)
- [Read our participation agreement](#)
- [Pilot program descriptions](#)
- [What you will need to sign up](#)
- [Invitation Letter](#)
- [Brochure](#)
- [Frequently Asked Questions](#)

Already Enrolled

**Smart Sense Pilot Program  
TOD Participant Home Page and  
Hourly Meter Usage Profile Screen**

## Smart Sense Pilot Program – TOD Participant Home Page

### Welcome to Duquesne Light's Smart Sense Pilot Program

Home
What We Need from You
Hourly Meter Usage Profile
Daily Meter Usage Profile
Frequently Asked Questions
Contact Us

You are enrolled in the Smart Sense Pilot Program.

As a reminder, and as noted in the invitation letter and the program's terms and conditions, participants must receive their electric supply from Duquesne Light Company throughout the Smart Sense pilot.

Thank you for enrolling in Duquesne Light's Smart Sense pilot program, designed to help customers better understand and manage their electricity costs by reducing or shifting their usage during days when demand is the highest.

The goal of the Smart Sense pilot program is to help us to develop a smart-meter system and time-of-day rates that will benefit all customers. By agreeing to participate for the full 18 months of the pilot program, you will receive:

- a total appreciation payment of \$120
- a variety of free energy-conservation information and products
- a better understanding of your electric usage

In addition, you may save money on your monthly bill as a result of changes you decide to make in how you use electricity in your home.

Thanks again for taking part in the Smart Sense Pilot Program. Your participation will help us develop a key component in the Pittsburgh region's energy future.

#### Learn More About the Program

- [Review our privacy policy](#)
- [Read our participation agreement](#)
- [Pilot program descriptions](#)
- [What you will need to sign up](#)
- [Invitation Letter](#)
- [Brochure](#)
- [Frequently Asked Questions](#)

# Smart Sense Pilot Program – TOD Participant Hourly Meter Usage Profile Screen

## Duquesne Light's Smart Sense Program - Hourly Meter Usage Profile

Home
What We Need from You
<b>Hourly Meter Usage Profile</b>
Daily Meter Usage Profile
Frequently Asked Questions
Contact Us



View a history of your daily electric usage by the hour each day.

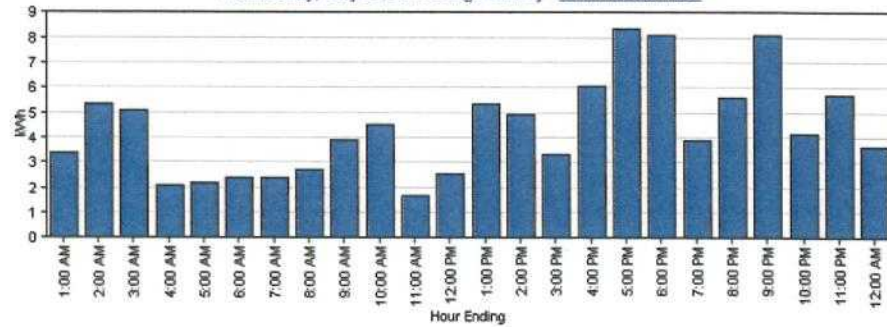
Select a Date:

07/27/2011

Generate

Max Usage:	8.34 kWh at 5:00 PM
Min Usage:	1.67 kWh at 11:00 AM
Total Usage:	105.51 kWh
Avg Usage:	4.40 kWh
High Temperature:	85°F
Low Temperature:	62°F

Wednesday, July 27, 2011 Usage History - [Show Tabular View](#)



Note: For the purpose of this pilot, hourly reads are provided for informational purposes only and are not used for billing. Meter reads for billing purposes are obtained once each month. Your scheduled meter-reading date is noted on page 1 of your bill.

**Smart Sense Pilot Program  
TOW Participant Home Page and  
Daily Meter Usage Profile Screen**

## Welcome to Duquesne Light's Smart Sense Pilot Program

Home
What We Need from You
Daily Meter Usage Profile
Frequently Asked Questions
Contact Us

You are enrolled in the Smart Sense Pilot Program.

As a reminder, and as noted in the invitation letter and the program's terms and conditions, participants must receive their electric supply from Duquesne Light Company throughout the Smart Sense pilot.

Thank you for enrolling in Duquesne Light's Smart Sense pilot program, designed to help customers better understand and manage their electricity costs by reducing or shifting their usage during days when demand is the highest.

The goal of the Smart Sense pilot program is to help us to develop a smart-meter system and time-of-day rates that will benefit all customers. By agreeing to participate for the full 18 months of the pilot program, you will receive:

- a total appreciation payment of \$120
- a variety of free energy-conservation information and products
- a better understanding of your electric usage

In addition, you may save money on your monthly bill as a result of changes you decide to make in how you use electricity in your home.

Thanks again for taking part in the Smart Sense Pilot Program. Your participation will help us develop a key component in the Pittsburgh region's energy future.

### Learn More About the Program

- [Review our privacy policy](#)
- [Read our participation agreement](#)
- [Pilot program descriptions](#)
- [What you will need to sign up](#)
- [Invitation Letter](#)
- [Brochure](#)
- [Frequently Asked Questions](#)



# Smart Sense Pilot Program – TOW Participant Daily Meter Usage Profile Screen

Durquesne Light > Customer Services > E-Service > Meter Usage Information >



View a history of your daily electric usage for up to 45 days. You can change your chart by selecting from the options below.<sup>1</sup>

### Auto-Generate List:

- Most recent bill
- Usage since last bill
- 7 day history
- 14 day history
- 30 day history

**Generate**

### Specific Days:

- 06/13 - Monday
- 06/14 - Tuesday
- 06/15 - Wednesday
- 06/16 - Thursday
- 06/17 - Friday
- 06/18 - Saturday

**Show Dates**

Hold "Ctrl" and click additional days.

## Usage Information

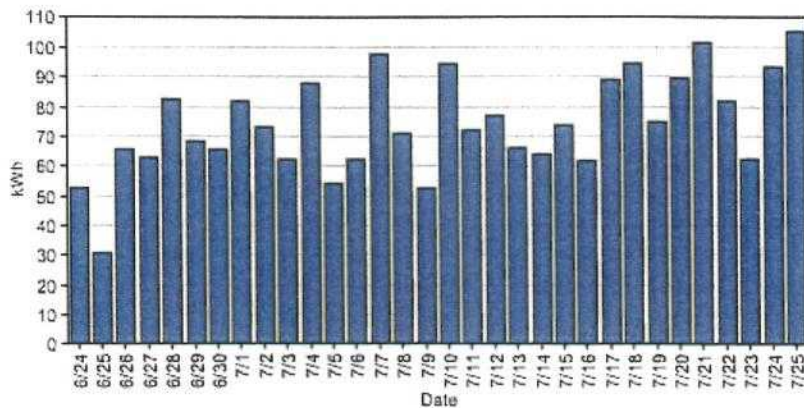
Currently viewing **Most recent bill**

<b>Max Usage:</b>	105.24 kWh on 7/25
<b>Min Usage:</b>	30.84 kWh on 6/25
<b>Total Usage:</b>	2373.96 kWh
<b>Avg Usage:</b>	74.19 kWh *

\* based on 32 days

[Learn about Energy Efficiency Tips to help you!!](#)

### Usage History for Account #:



[Show/Hide Tabular Data](#)

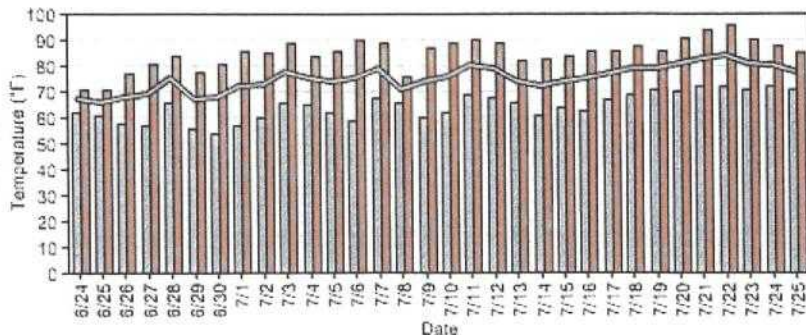
Note: Daily reads are provided for informational purposes only and are not used for billing. Meter reads for billing purposes are obtained once each month. Your scheduled meter-reading date is noted on page 1 of your bill.

## Weather History

Low Temp    High Temp    Average Temp

### Weather Information

<b>Warmest day:</b>	96 °F on 7/22
<b>Coldest day:</b>	54 °F on 6/30
<b>Average Daily Temp:</b>	75 °F



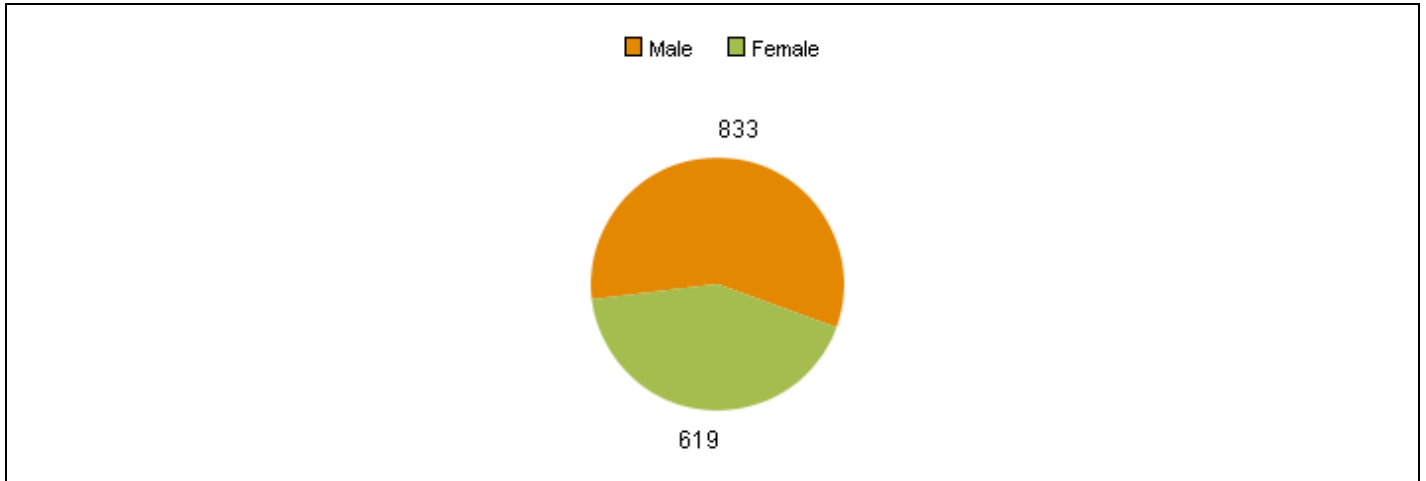
<sup>1</sup>NOTE: Information is only available for past 45 days.

# **Attachment 8**

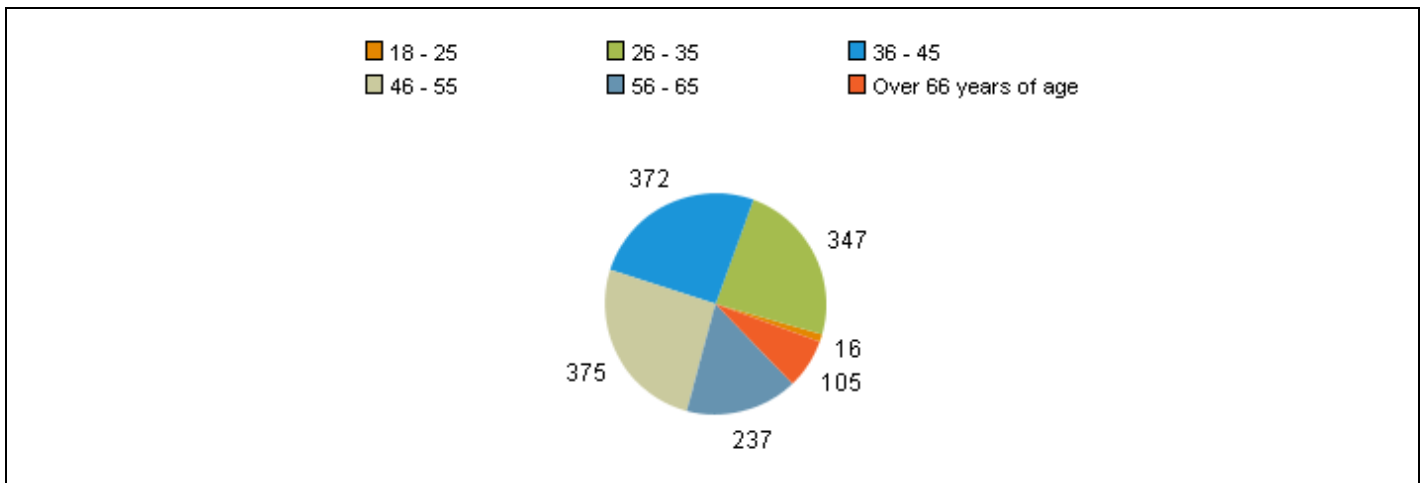
**Demographic Statistics – All Customers**

# Smart Sense Demographic Survey - All Customers

1.) What is your gender?

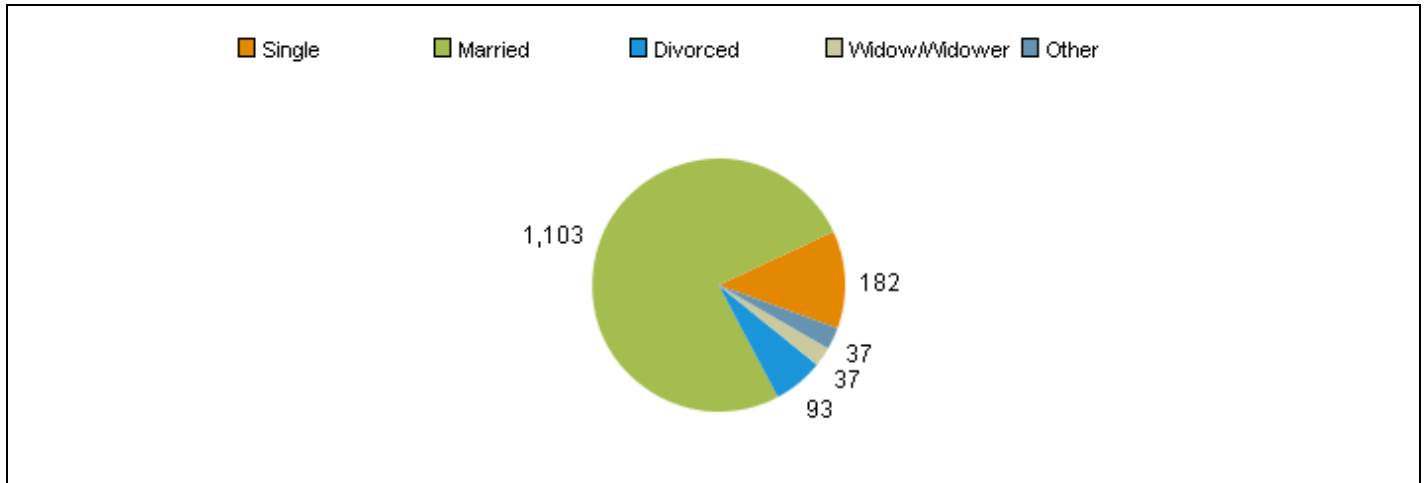


2.) What is your age?

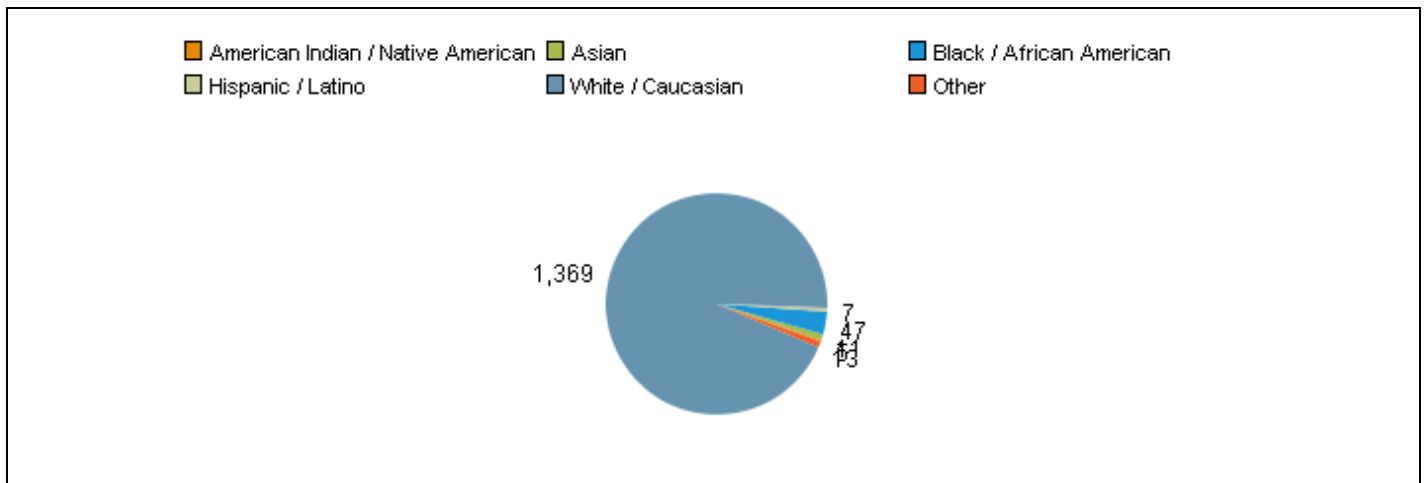


## Smart Sense Demographic Survey - All Customers – (Continued)

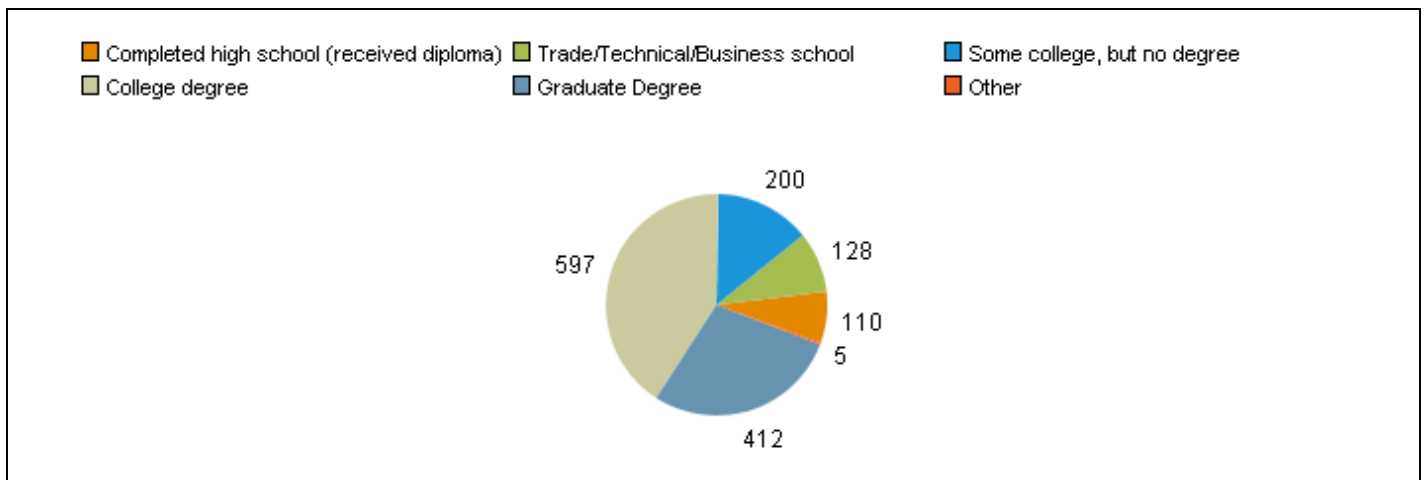
3.) What is your marital status?



4.) How would you describe your race?

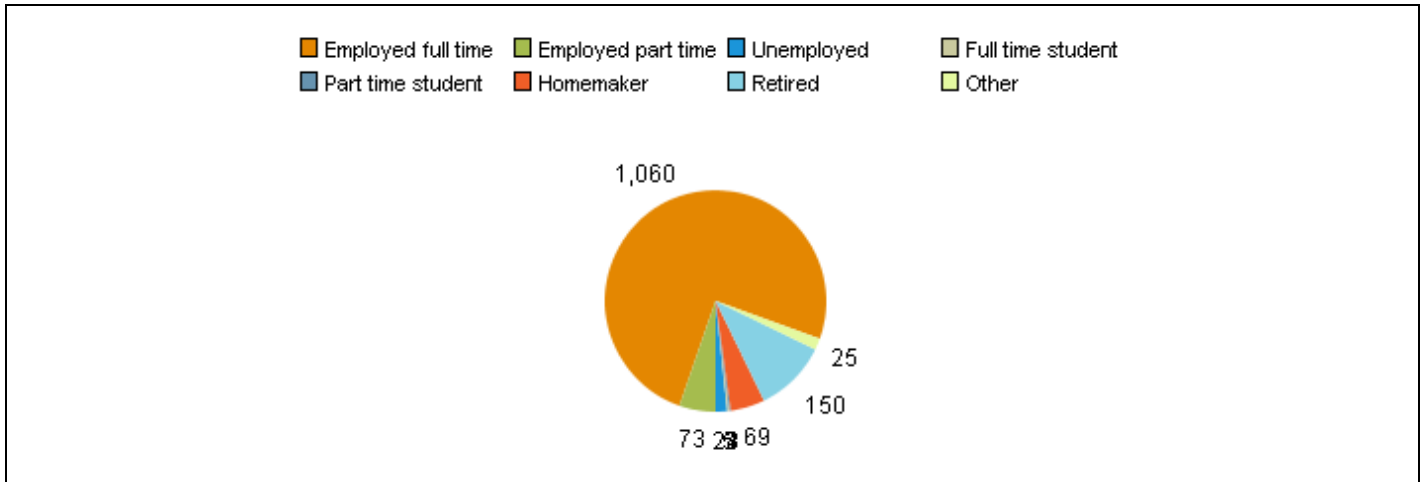


5.) What is the highest level of education that you've completed?

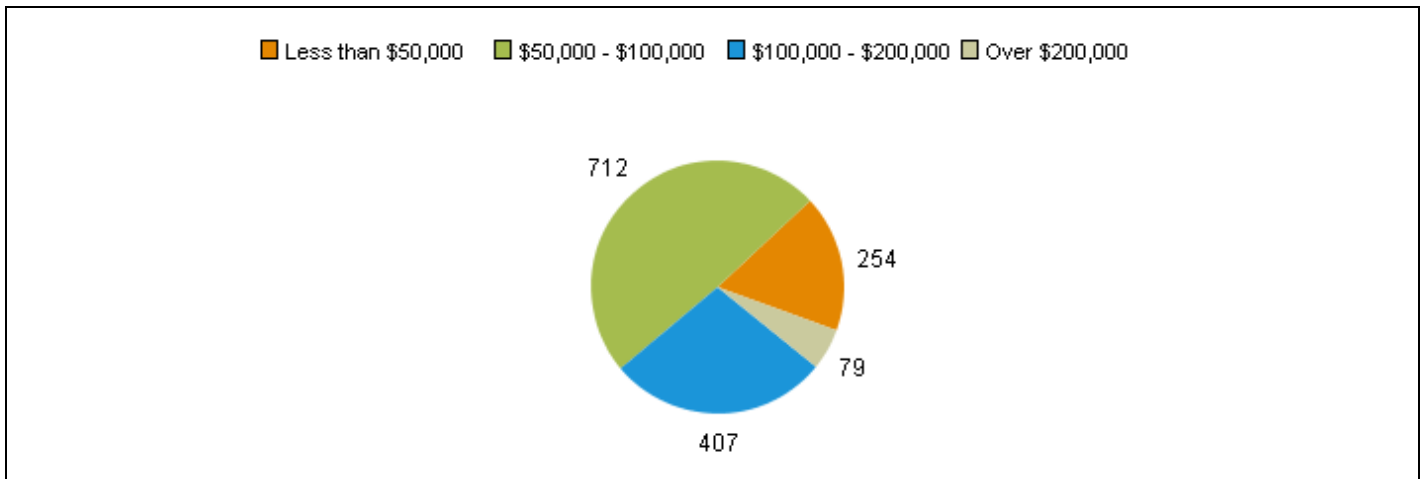


## Smart Sense Demographic Survey - All Customers – (Continued)

6.) How would you describe your current employment status? (Please check all that may apply.)

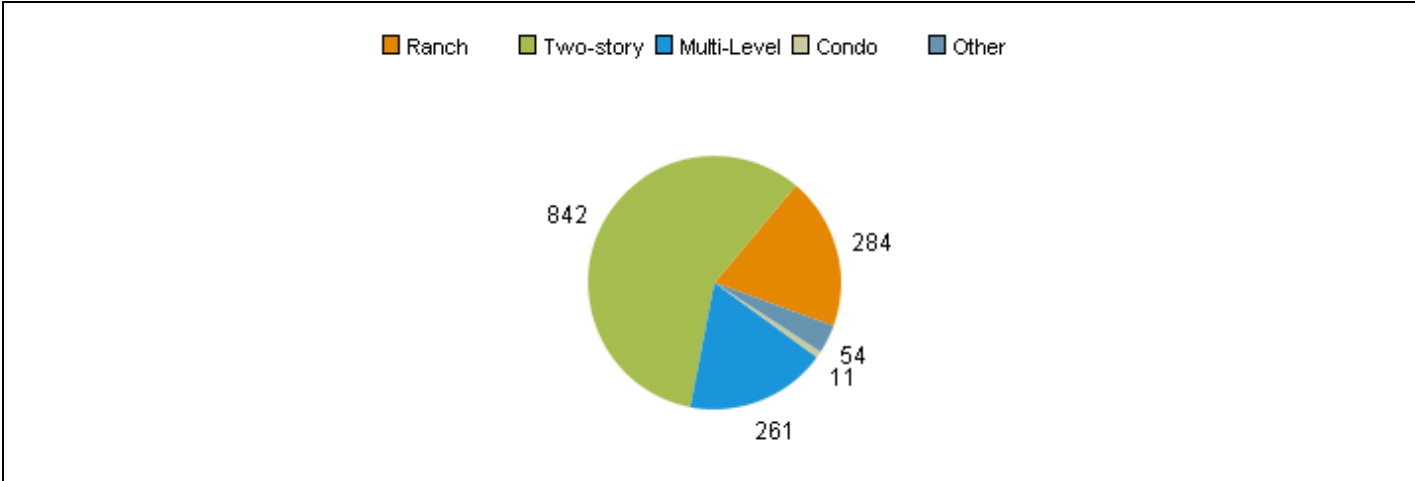


7.) What was your household's annual income for 2010?

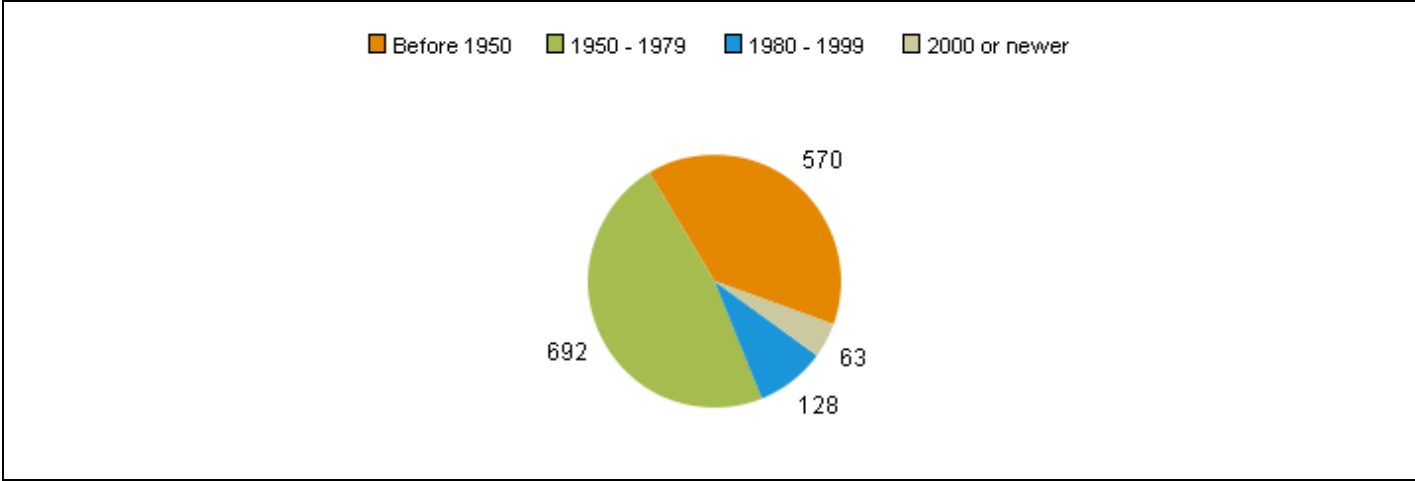


# Smart Sense Demographic Survey - All Customers – (Continued)

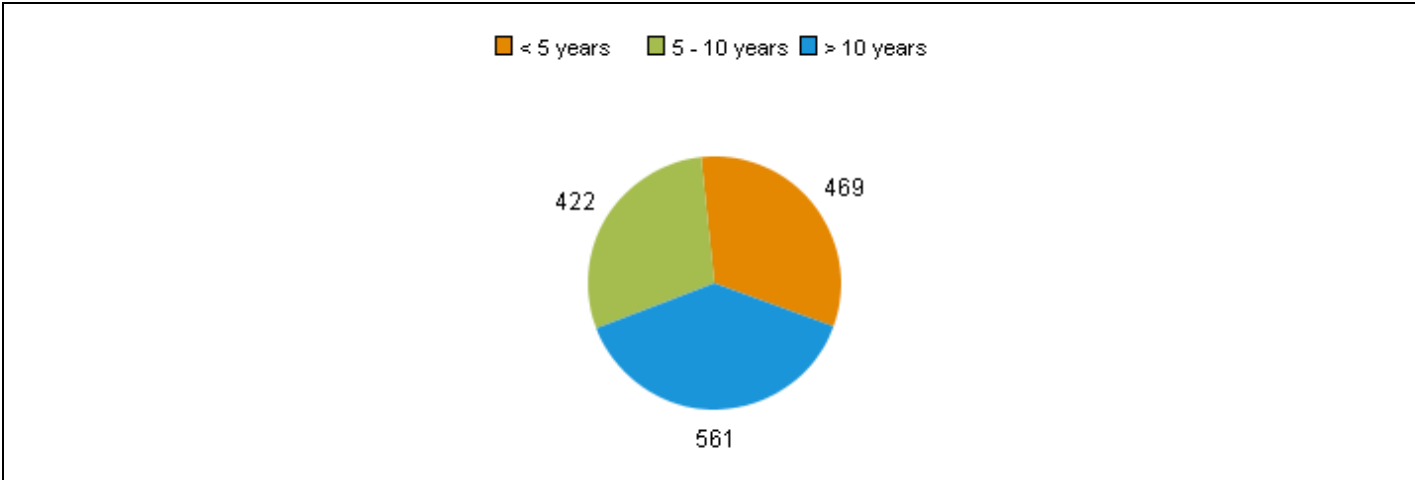
8.) Do you live in a:



9.) What year was your home built?

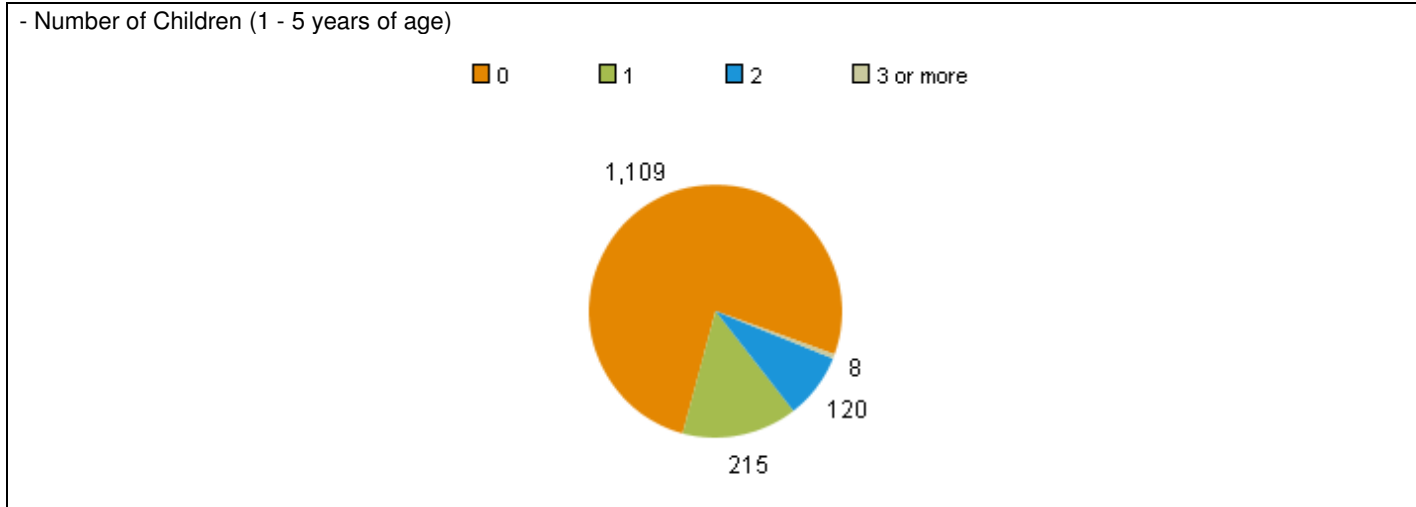
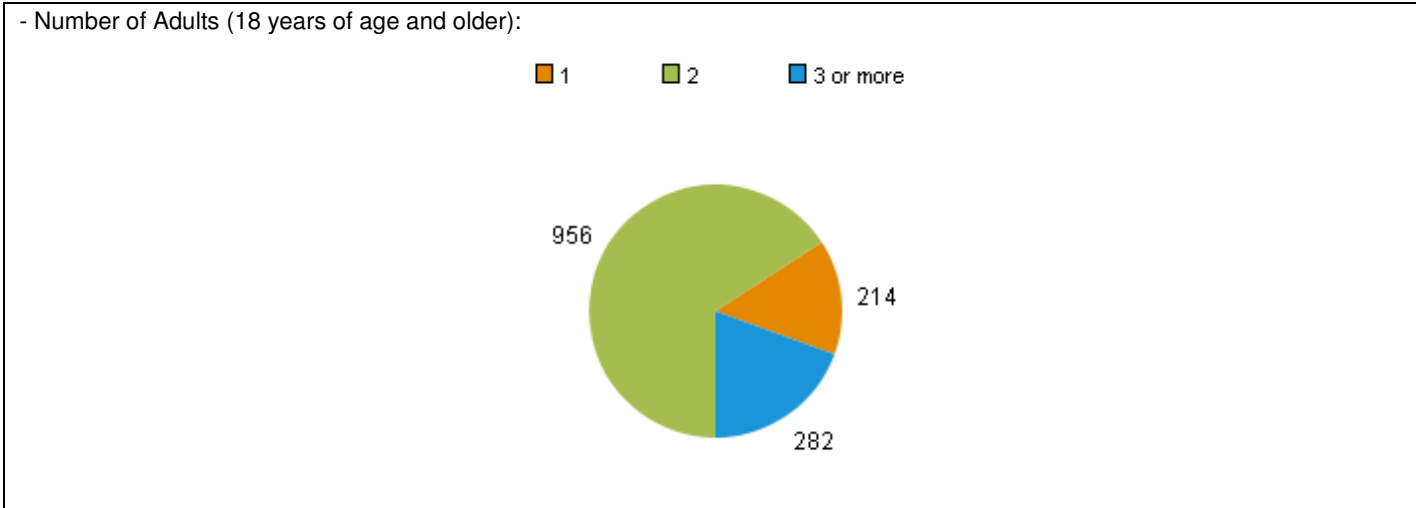


10.) How long have you lived at this residence?



# Smart Sense Demographic Survey - All Customers – (Continued)

11.) Including you, how many people live in your home? (Please select an answer from each drop down list below.)

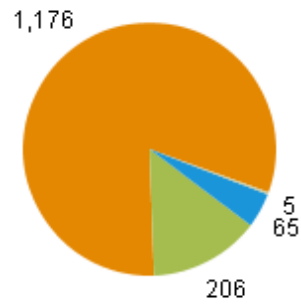


## Smart Sense Demographic Survey - All Customers – (Continued)

11.) Including you, how many people live in your home? (Please select an answer from each drop down list below.) – (Continued)

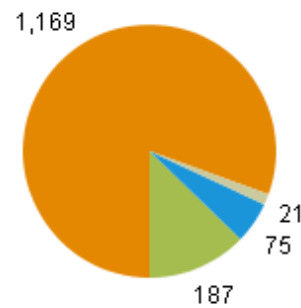
- Number of Children (6 - 10 years of age)

0 1 2 3 or more



- Number of Children (11 - 17 years of age):

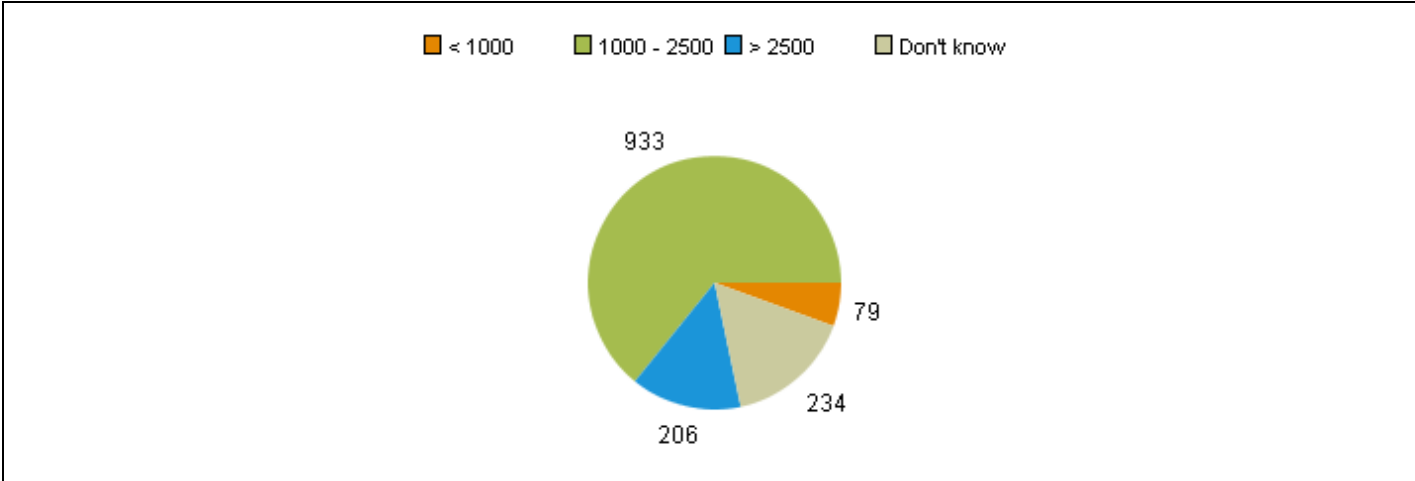
0 1 2 3 or more



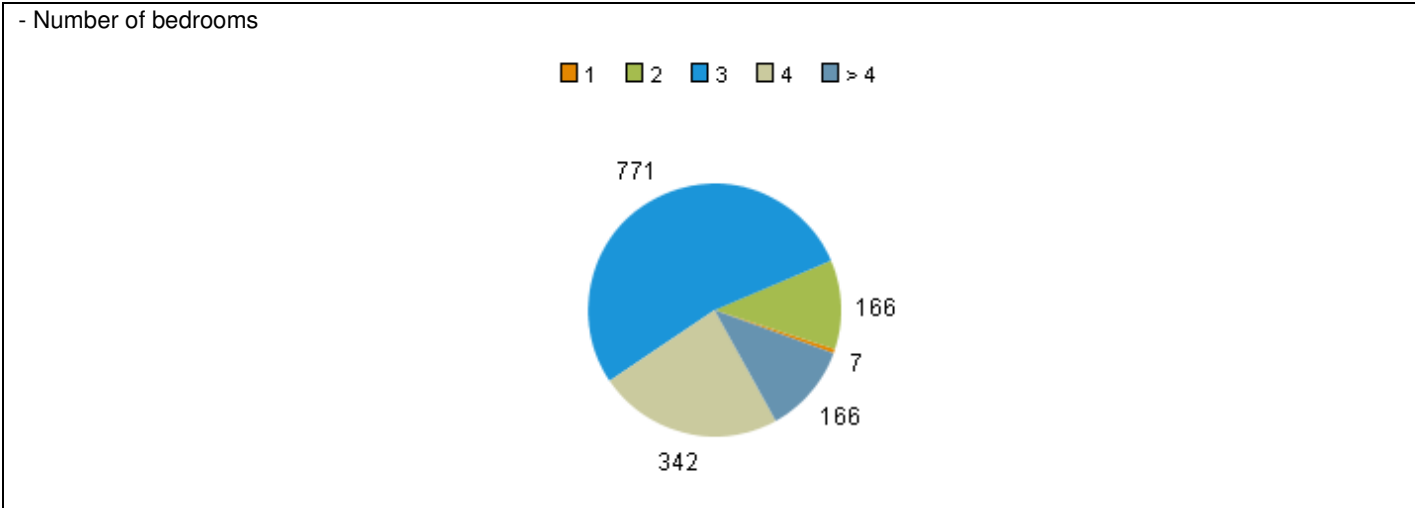


# Smart Sense Demographic Survey - All Customers – (Continued)

12.) What is your home's square footage of living space?

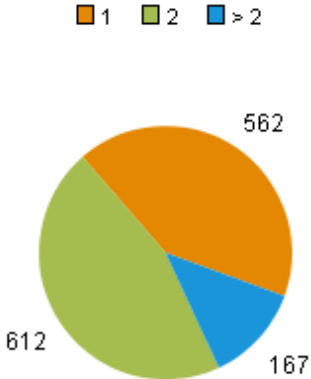


13.) How many rooms does your home have? Please count living areas and bath rooms, but skip closets and hallways. (Please select an answer from each drop down list below.)

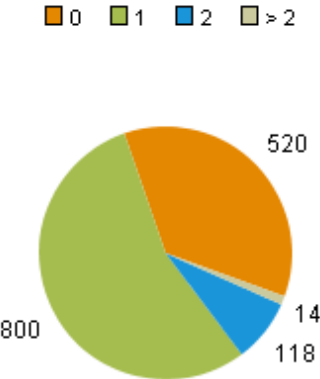


# Smart Sense Demographic Survey - All Customers – (Continued)

- Number of full bathrooms

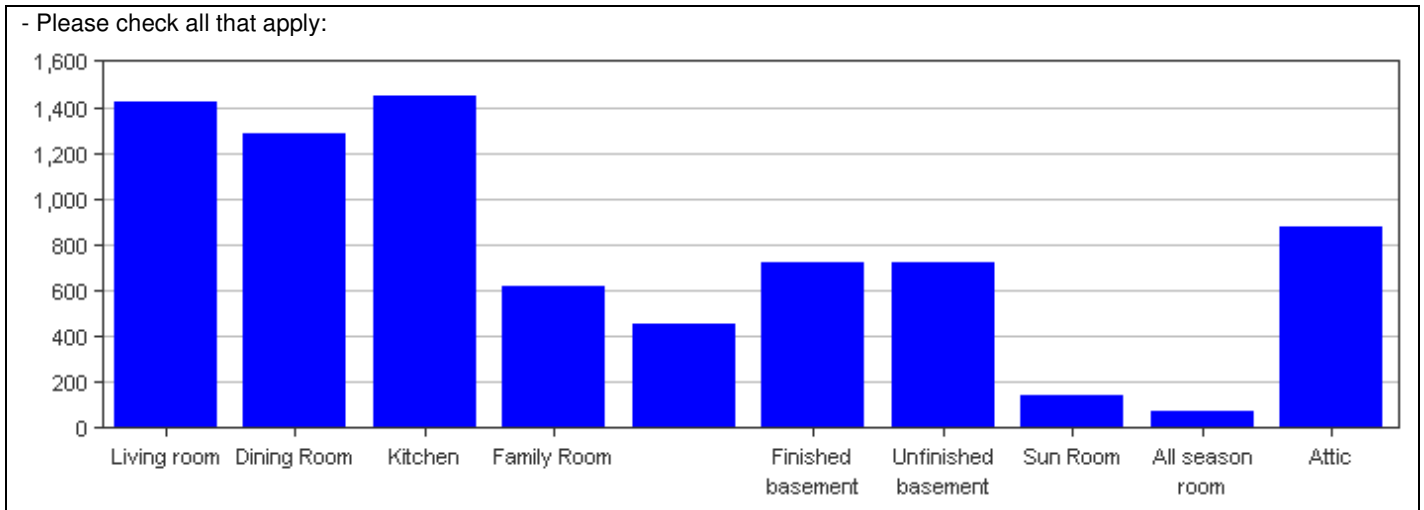
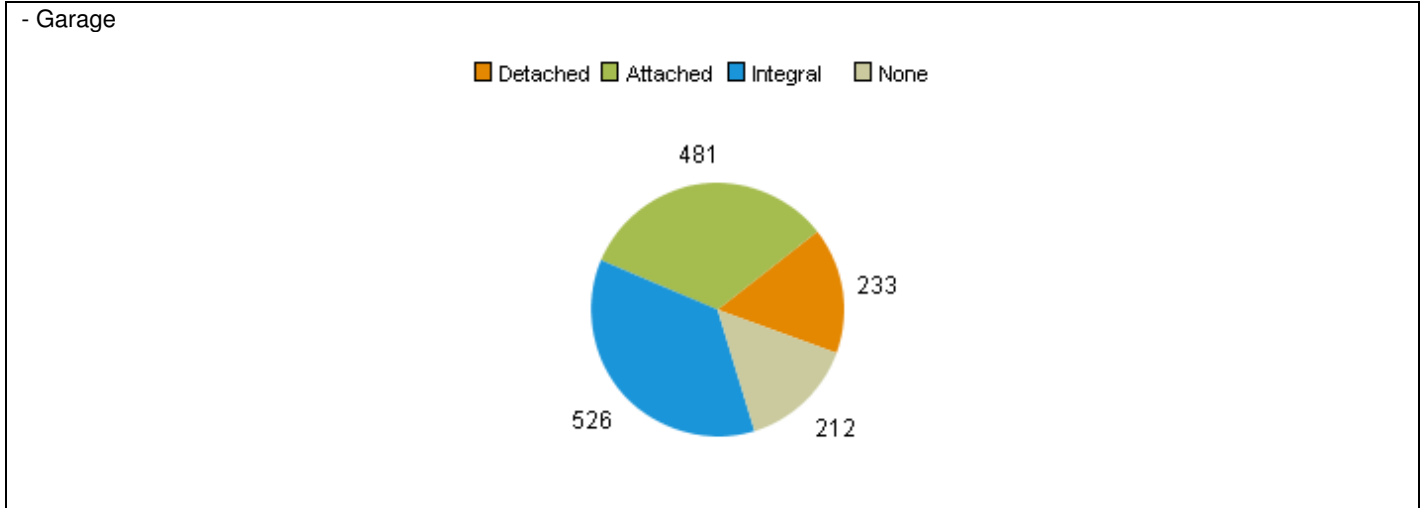


- Number of partial bathrooms



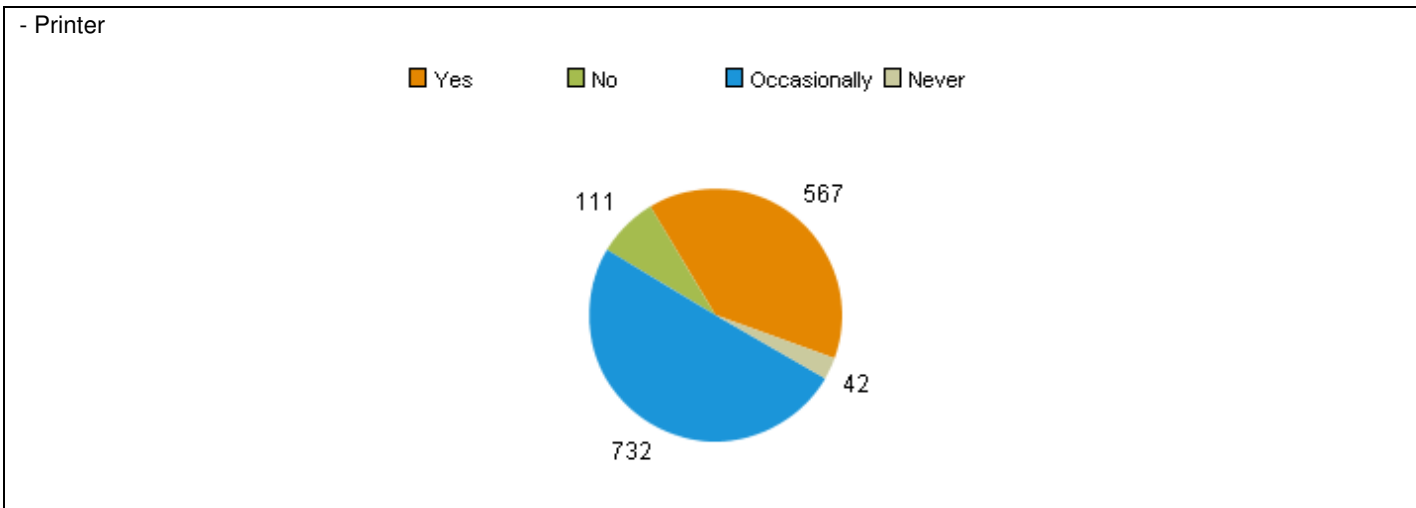
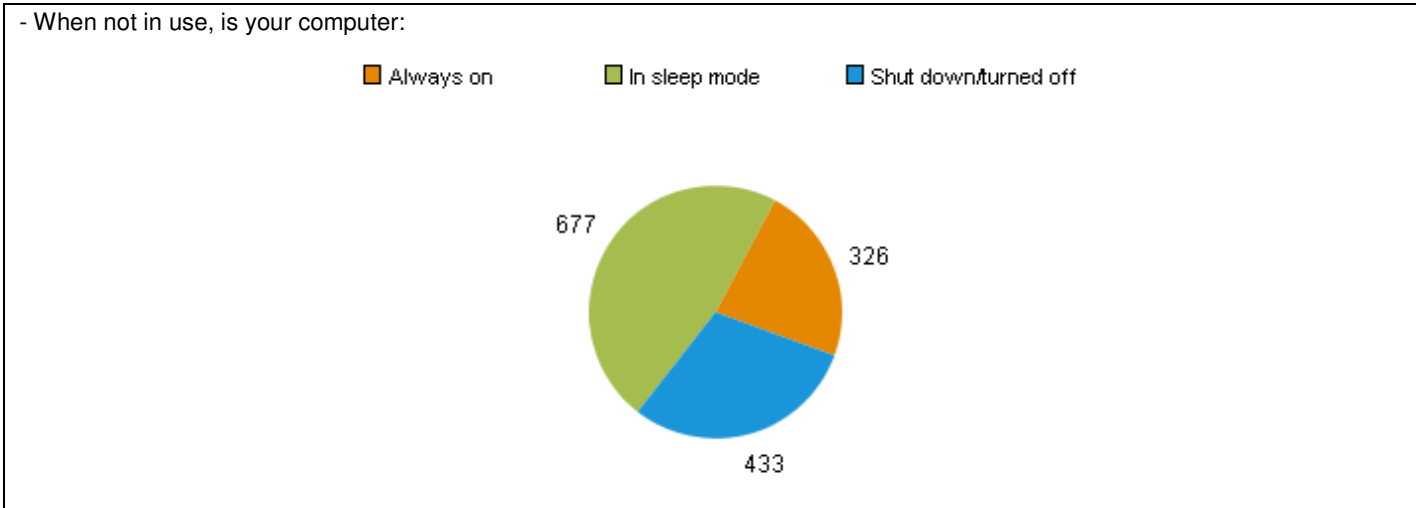
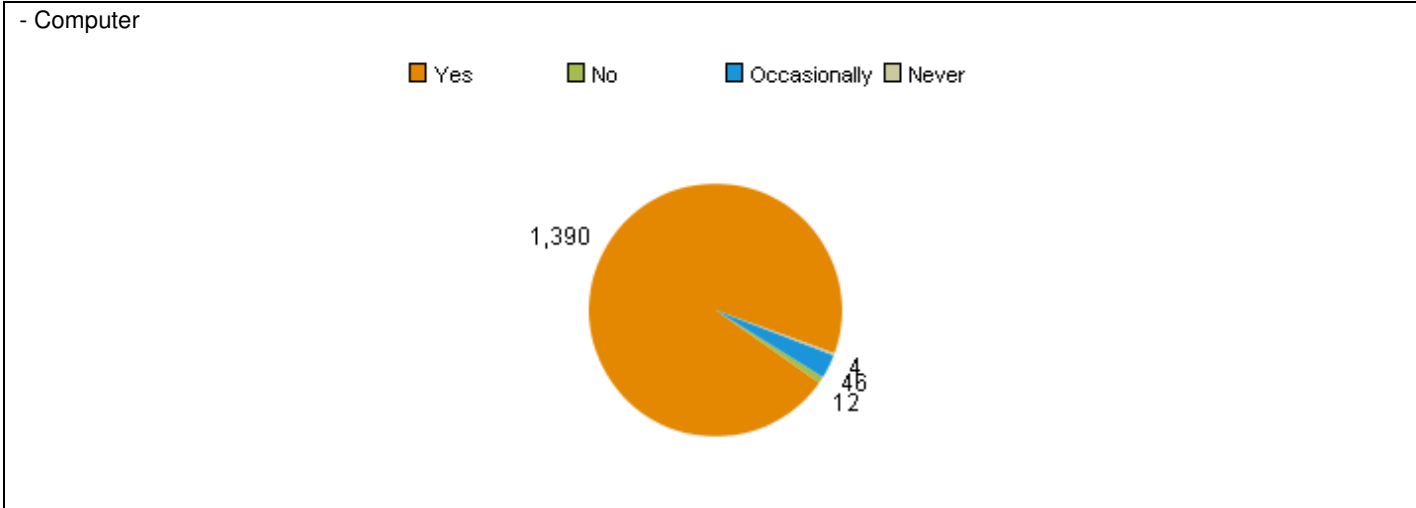
## Smart Sense Demographic Survey - All Customers – (Continued)

13.) How many rooms does your home have? Please count living areas and bath rooms, but skip closets and hallways. (Please select an answer from each drop down list below.) – (Continued)



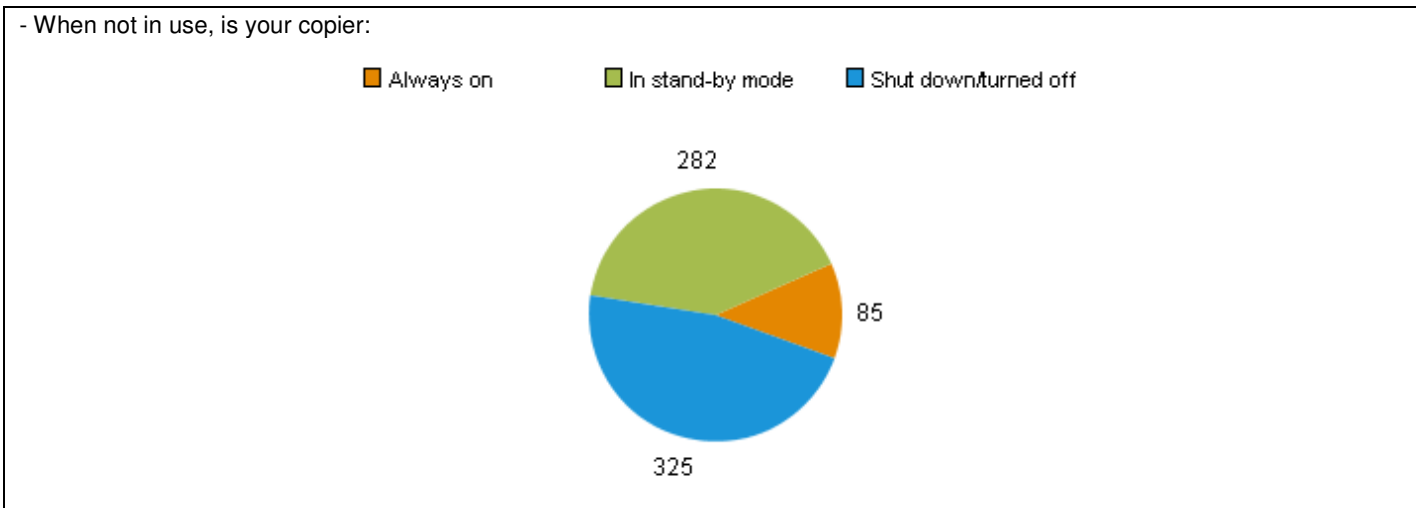
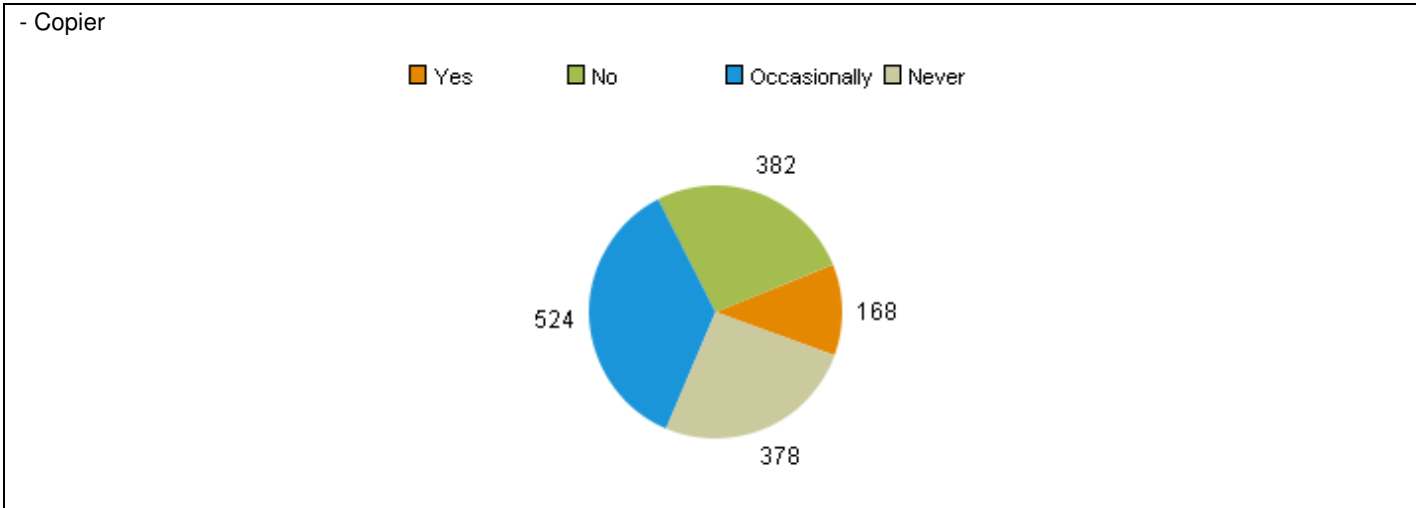
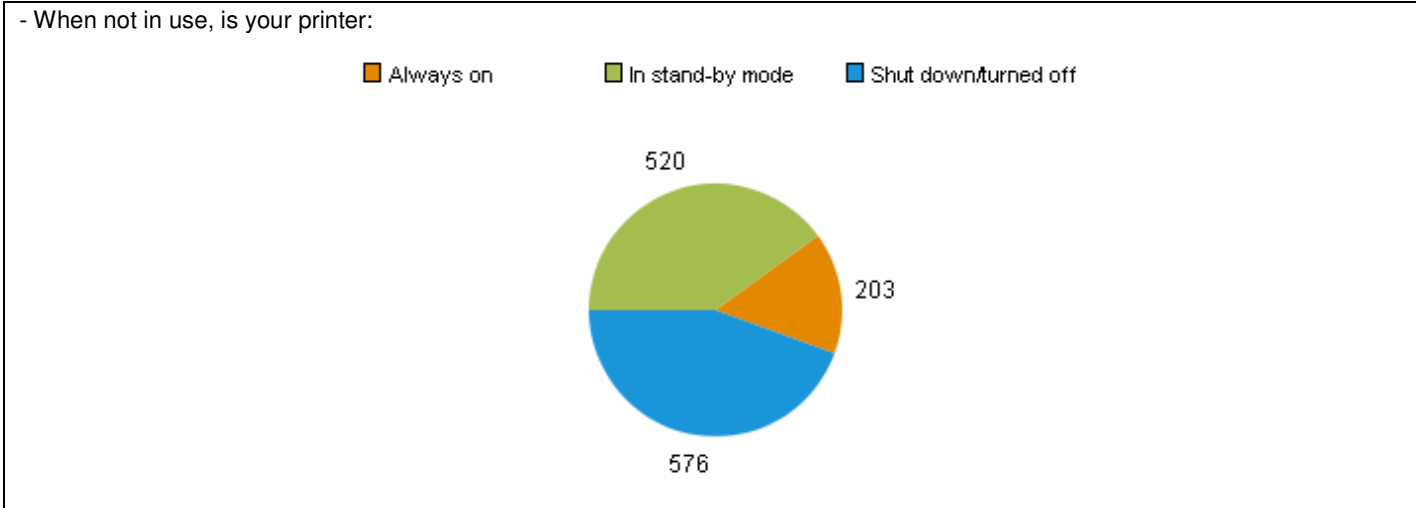
# Smart Sense Demographic Survey - All Customers – (Continued)

14.) Do you use any of the following equipment on a daily basis:



# Smart Sense Demographic Survey - All Customers – (Continued)

14.) Do you use any of the following equipment on a daily basis: - (Continued)

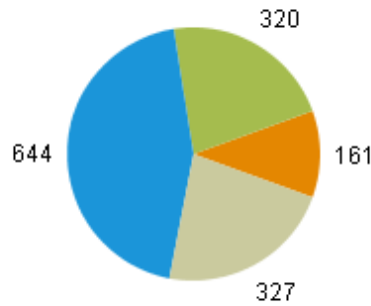


## Smart Sense Demographic Survey - All Customers – (Continued)

14.) Do you use any of the following equipment on a daily basis: - (Continued)

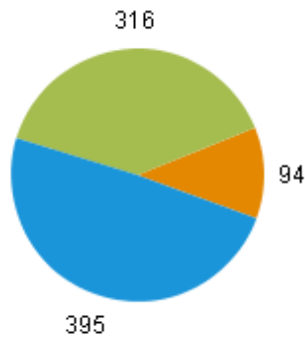
- Scanner

■ Yes    
 ■ No    
 ■ Occasionally    
 ■ Never



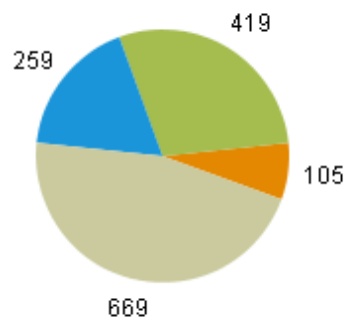
- When not in use, is your scanner:

■ Always on    
 ■ In stand-by mode    
 ■ Shut down/turned off



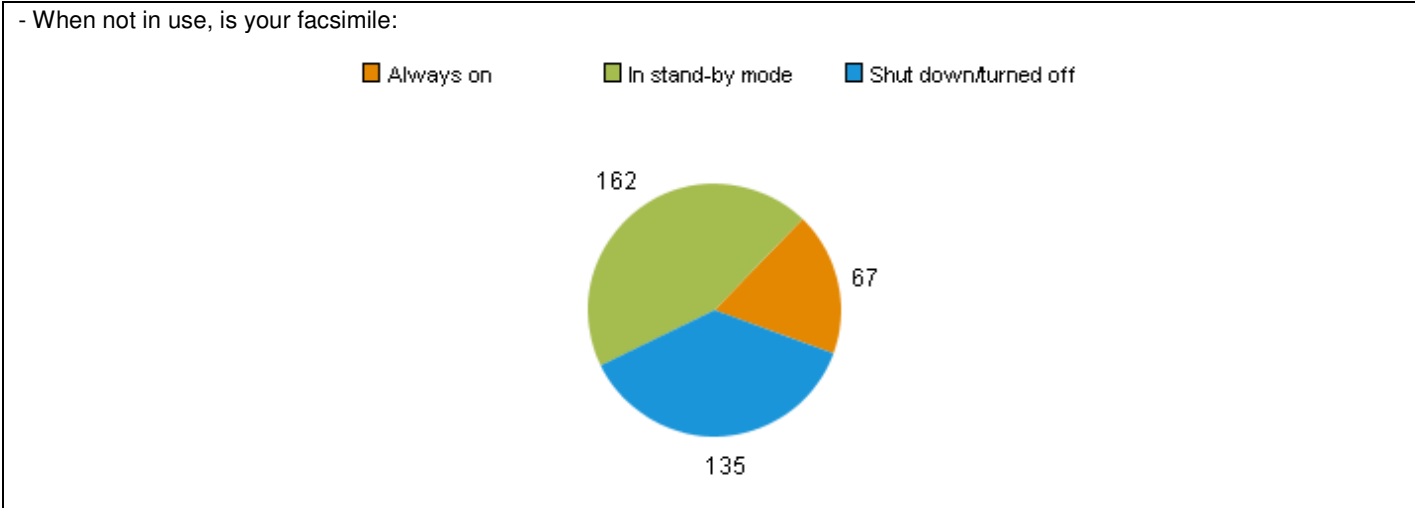
- Facsimile Machine

■ Yes    
 ■ No    
 ■ Occasionally    
 ■ Never

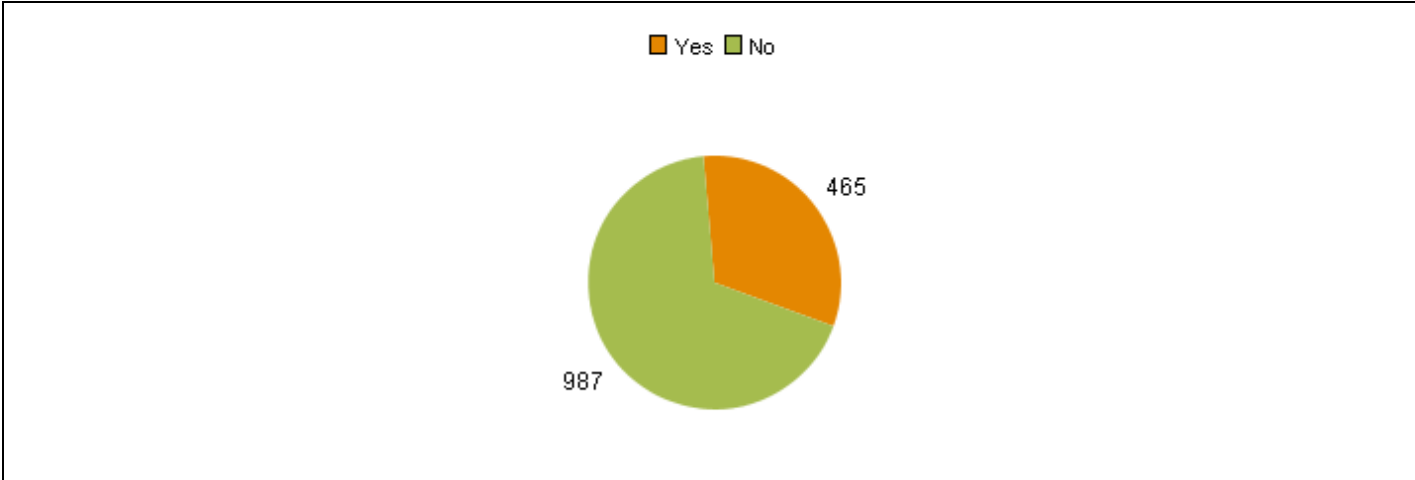


# Smart Sense Demographic Survey - All Customers – (Continued)

14.) Do you use any of the following equipment on a daily basis: - (Continued)

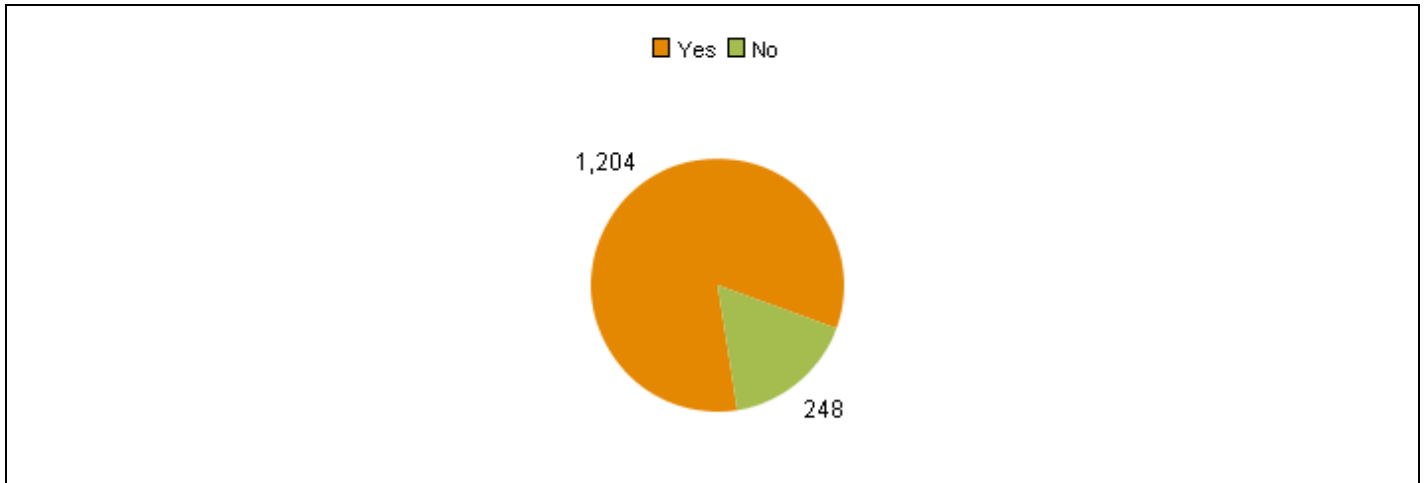


15.) Do you have an attic fan?

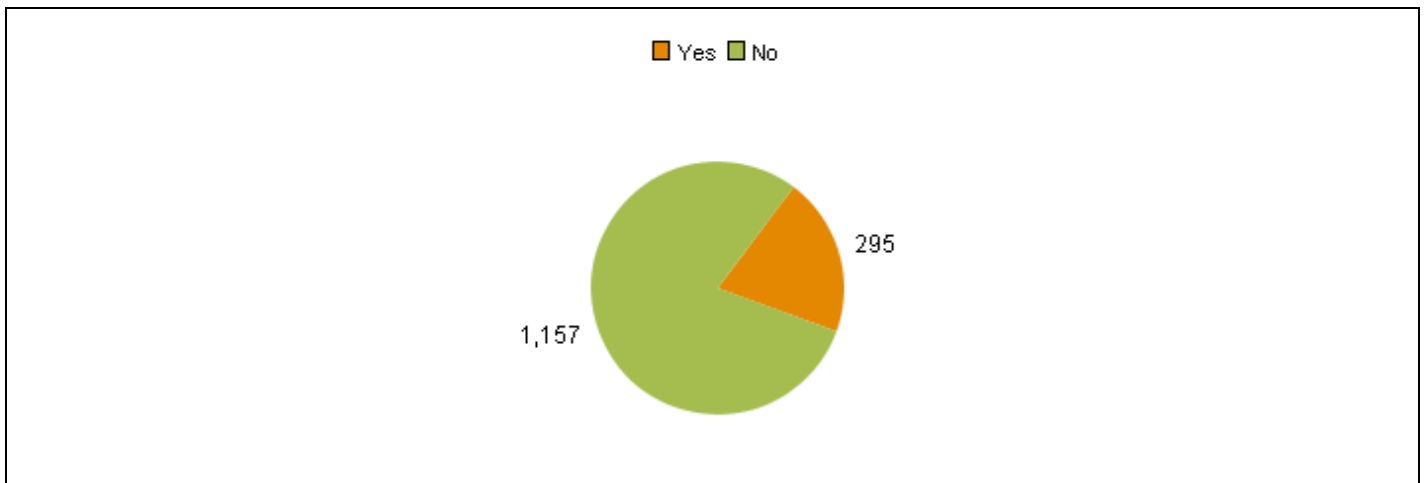


## Smart Sense Demographic Survey - All Customers – (Continued)

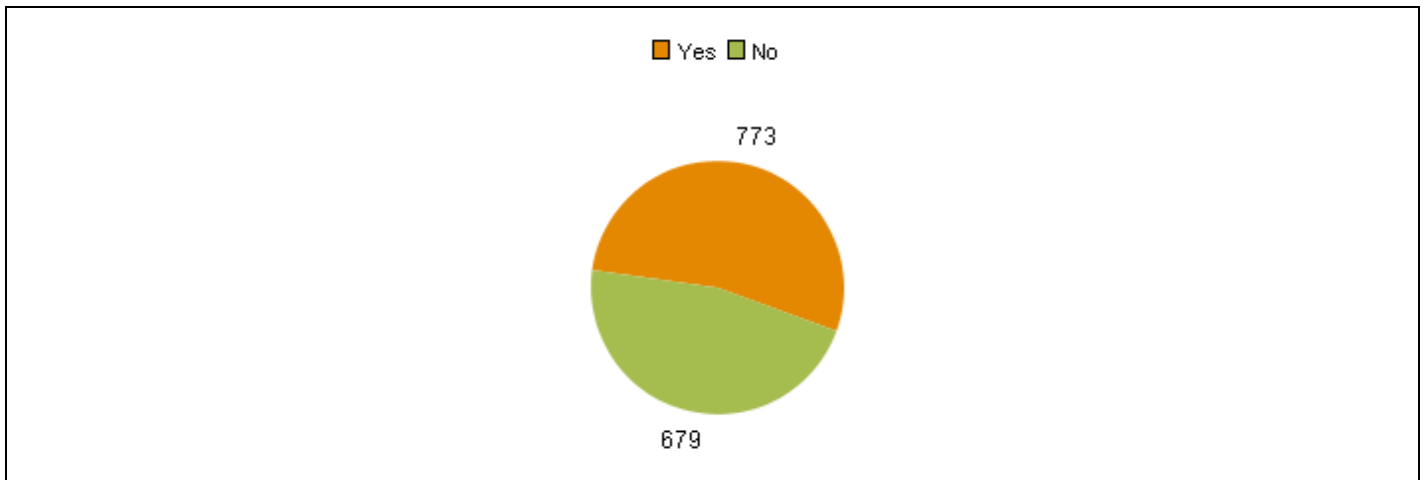
16.) Are there ceiling fans installed in your home?



17.) Do you have an electric hot water heater?



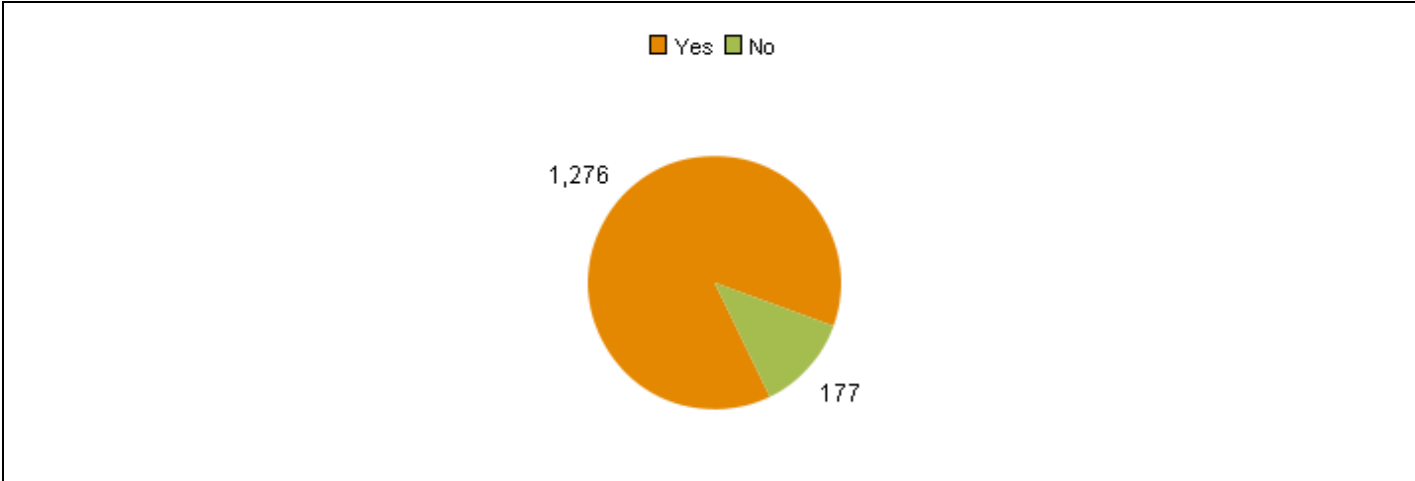
18.) Do you have an electric clothes dryer?



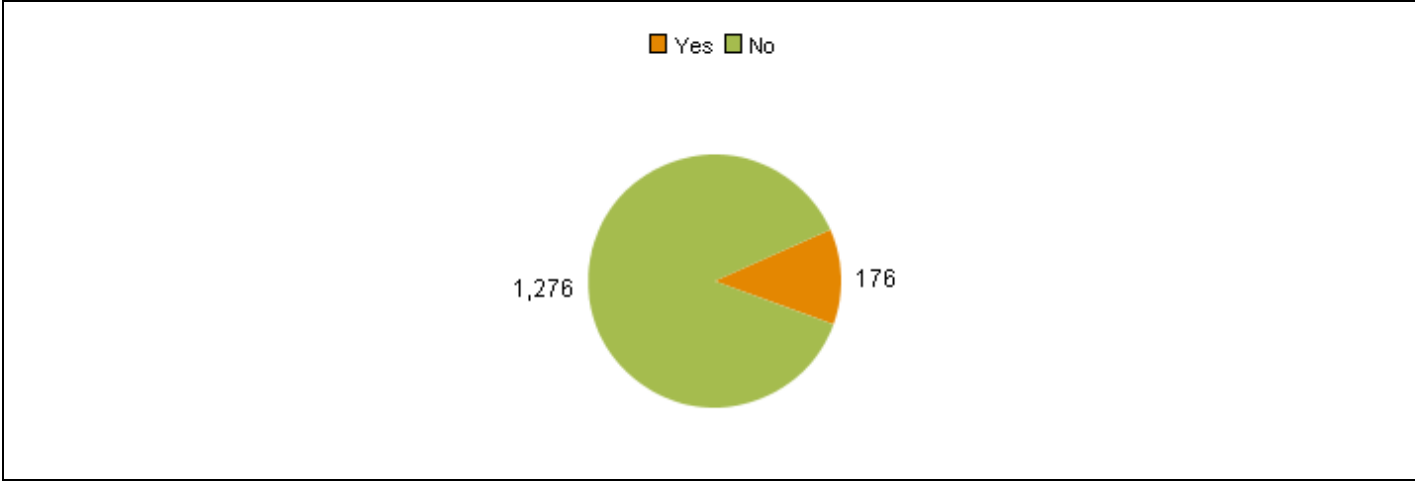


# Smart Sense Demographic Survey - All Customers – (Continued)

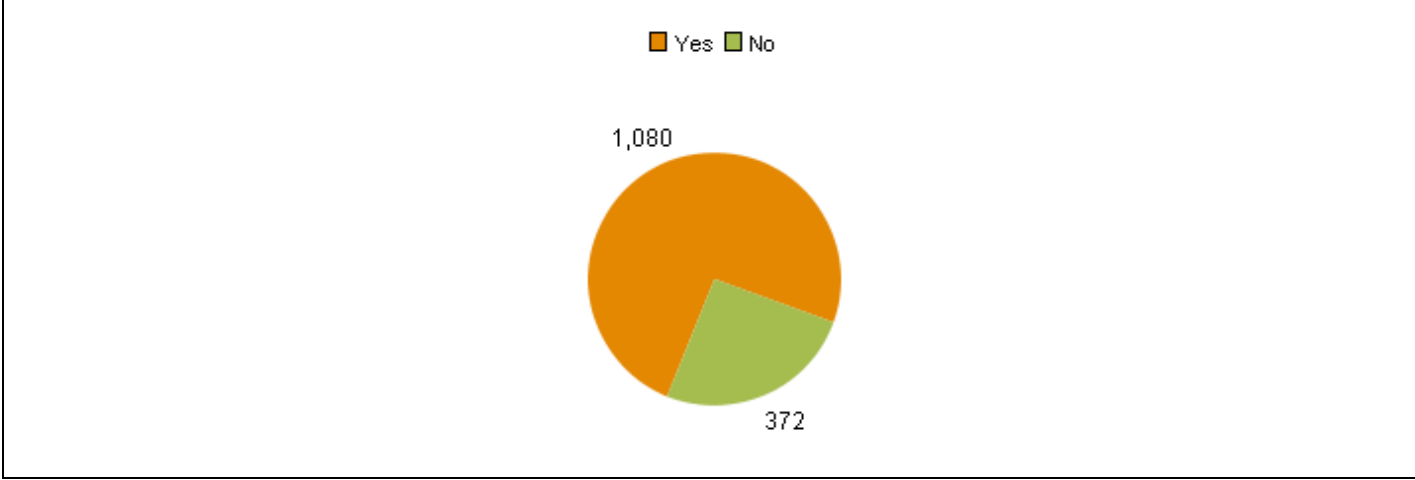
19.) Do you have a dishwasher?



20.) Do you have any window A/C units?

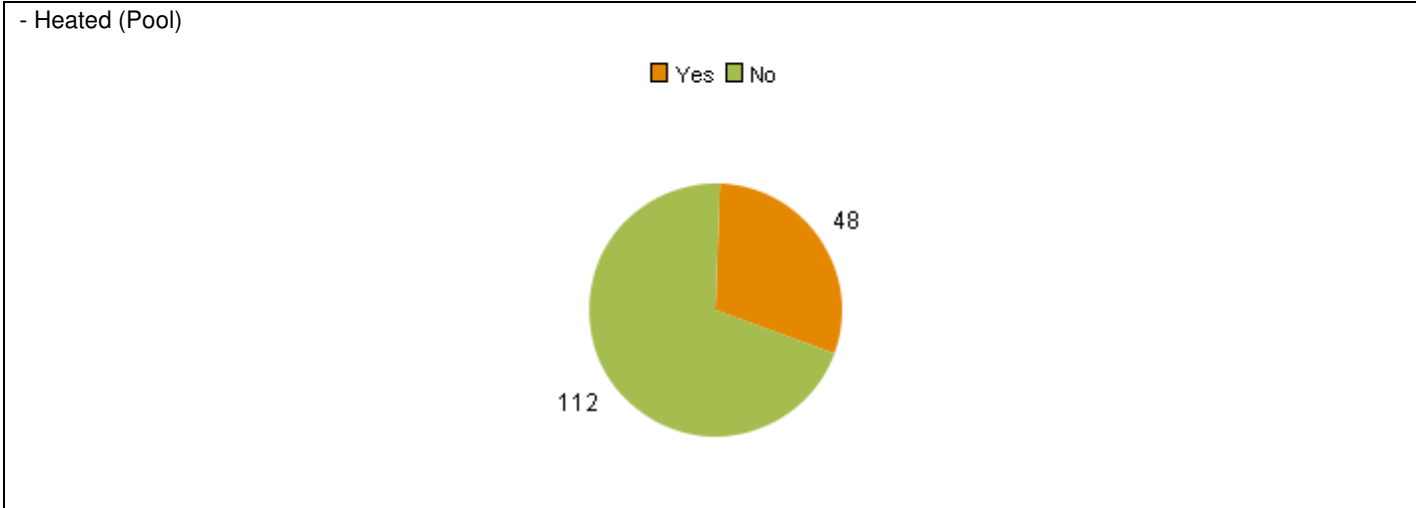
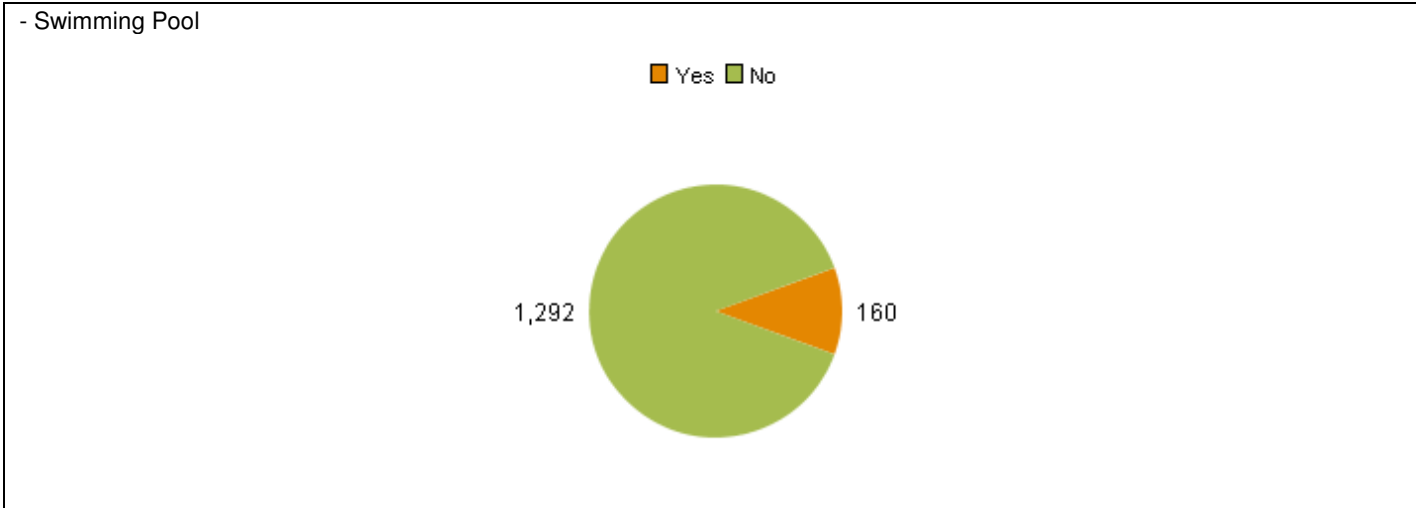


21.) Is there a programmable thermostat installed at your home?



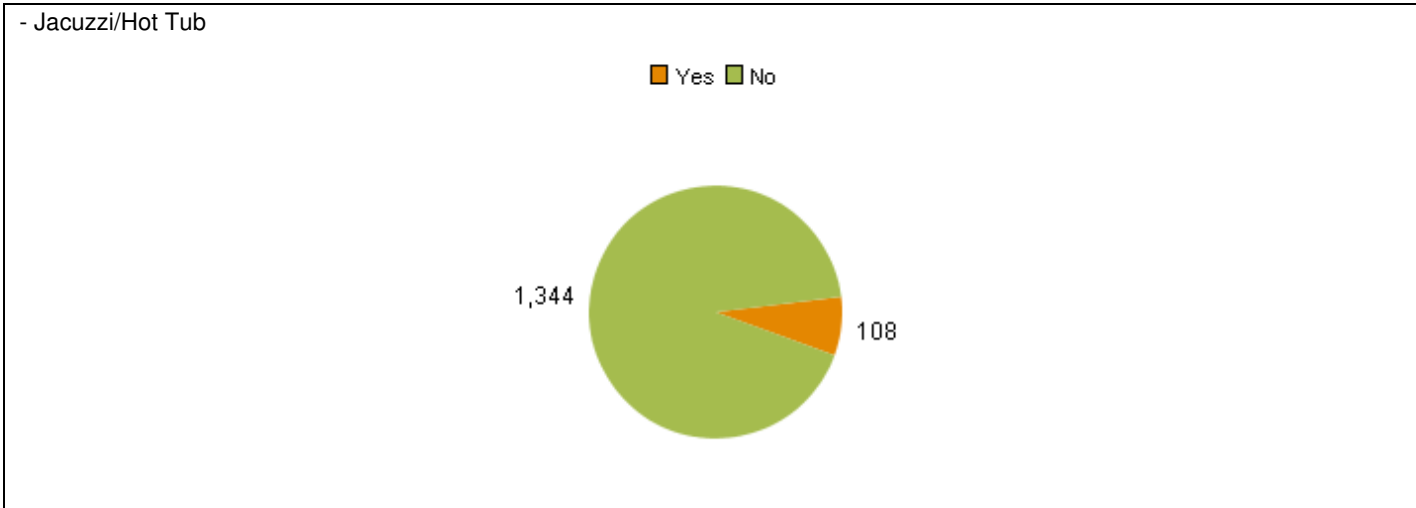
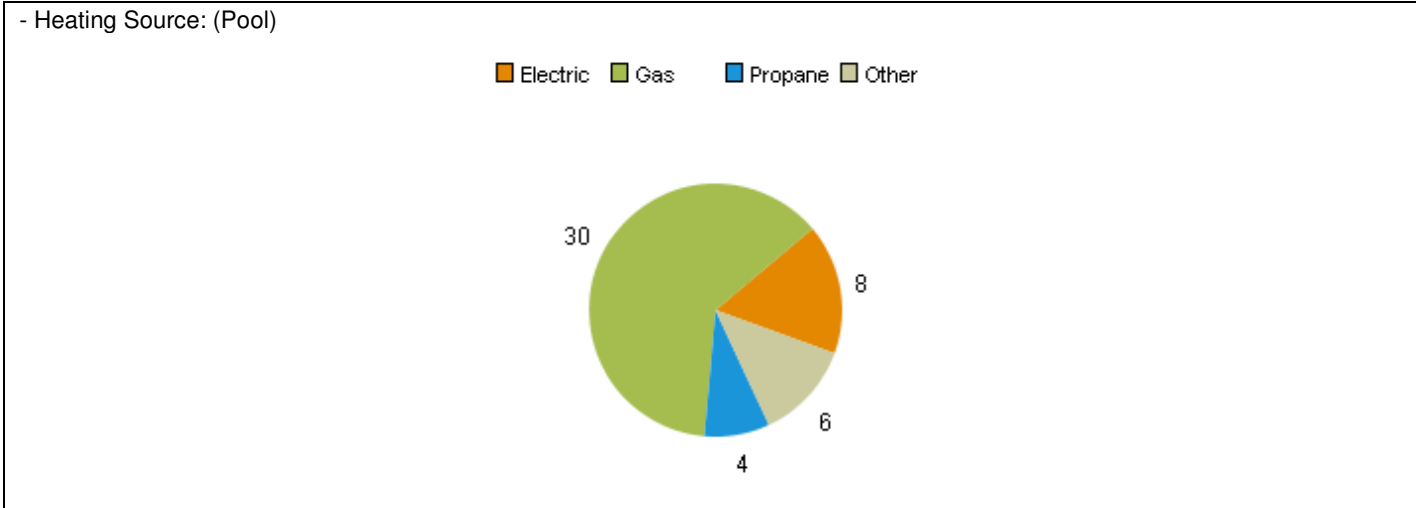
# Smart Sense Demographic Survey - All Customers – (Continued)

22.) Do you have any of the following:



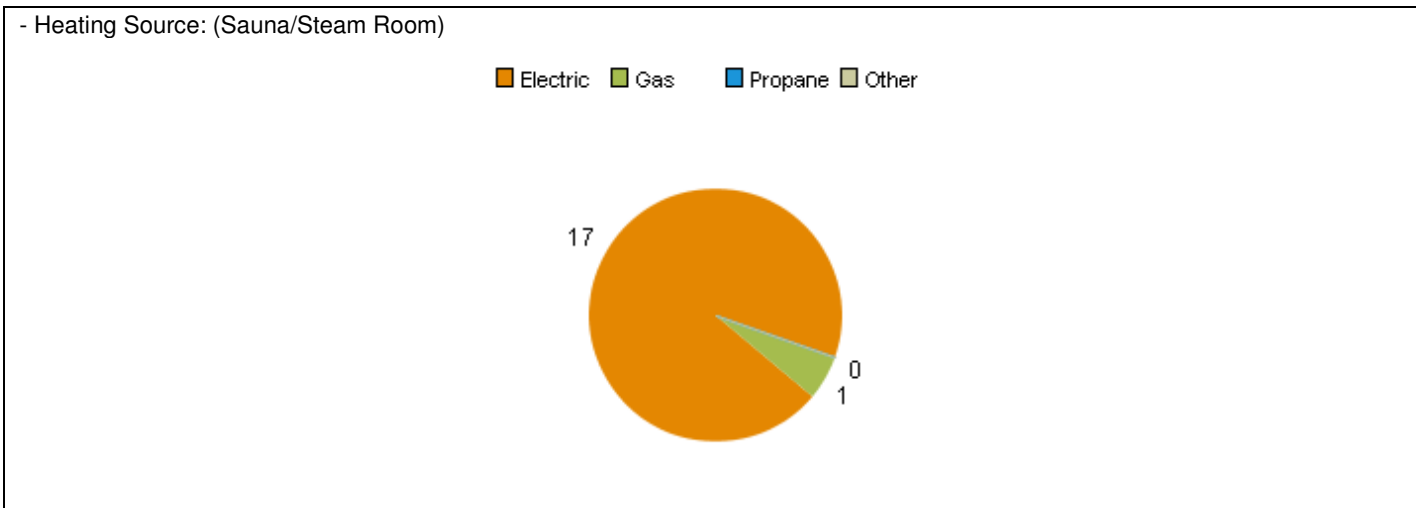
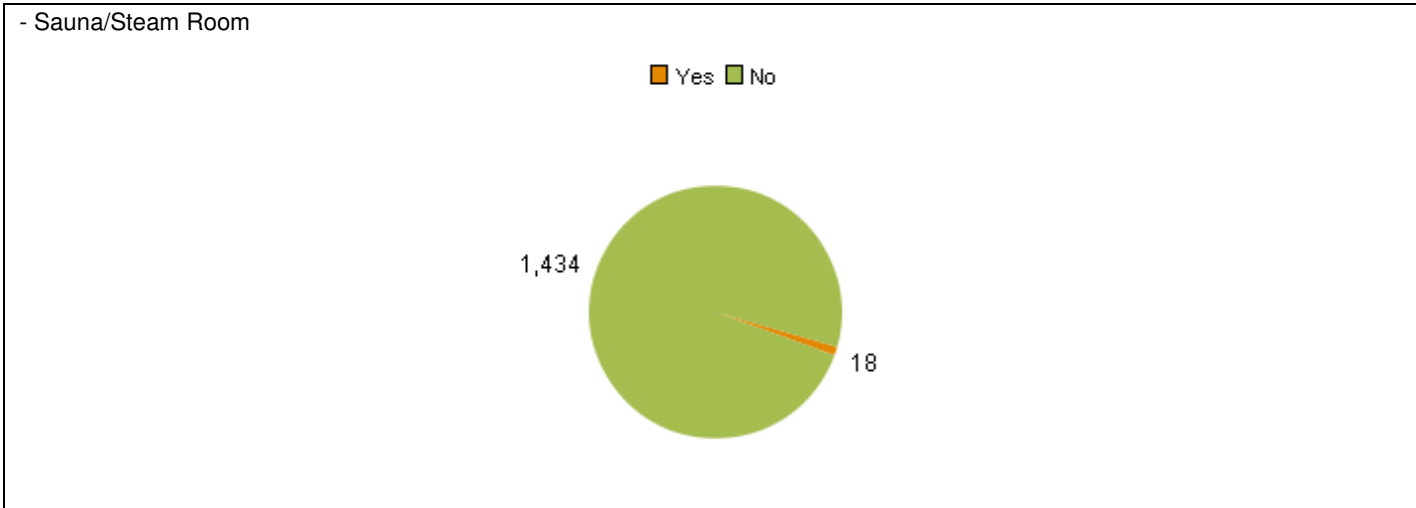
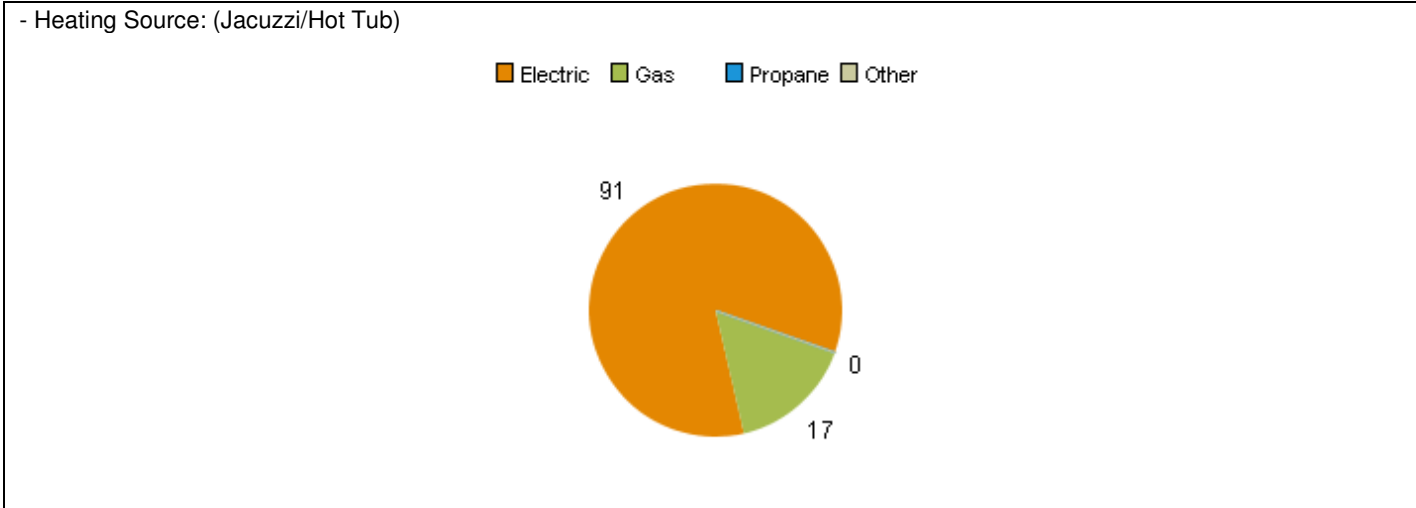
# Smart Sense Demographic Survey - All Customers – (Continued)

22.) Do you have any of the following: - (Continued)



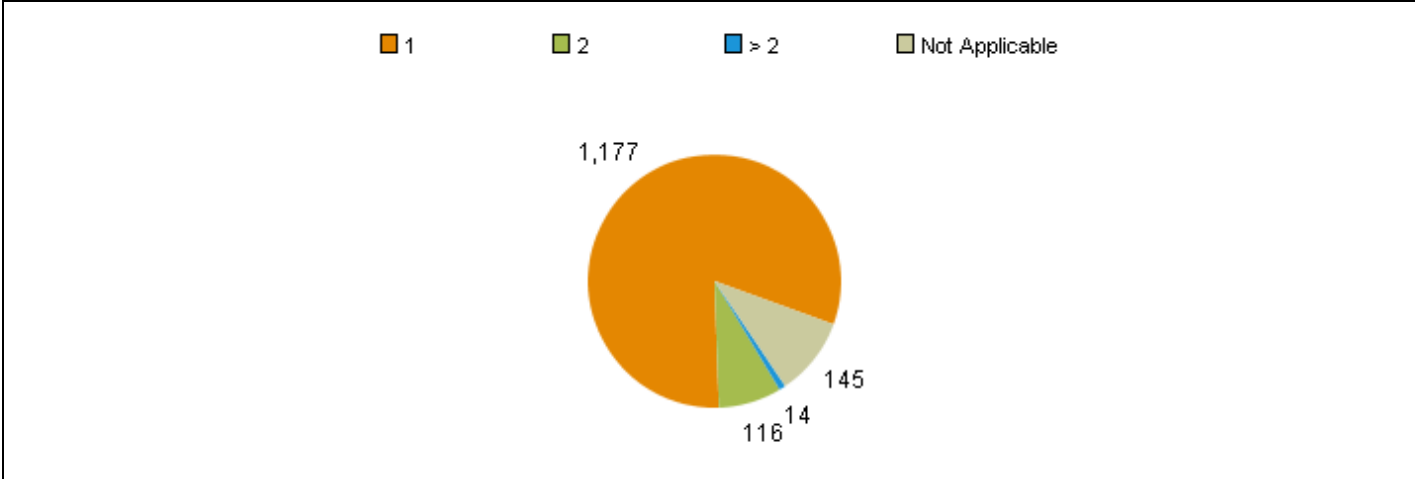
# Smart Sense Demographic Survey - All Customers – (Continued)

22.) Do you have any of the following: - (Continued)

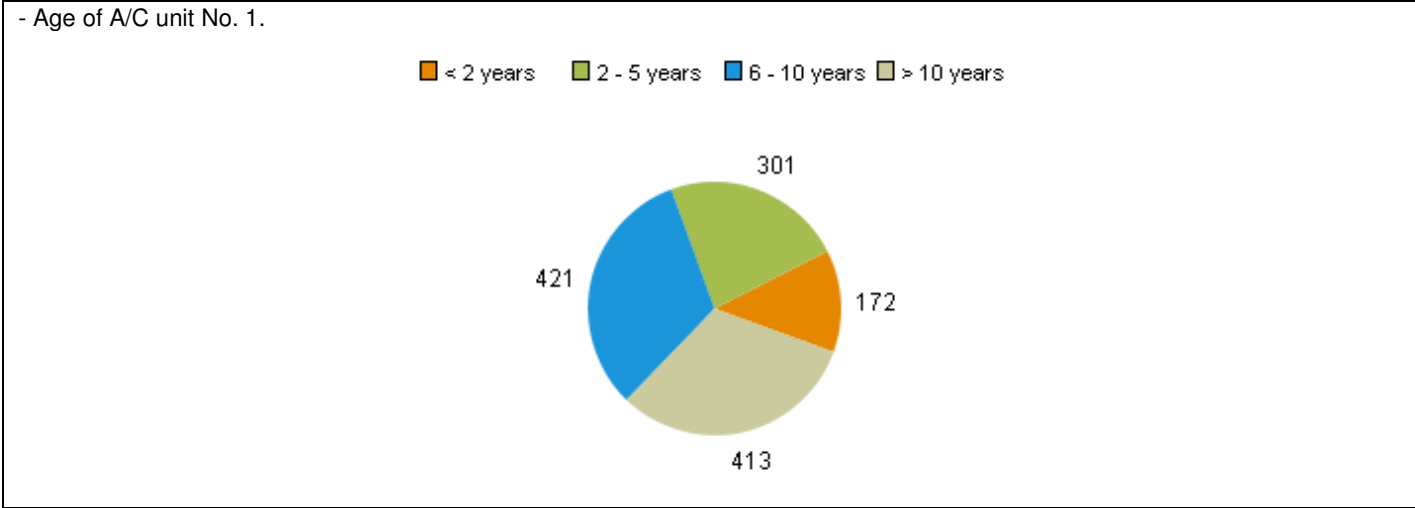


# Smart Sense Demographic Survey - All Customers – (Continued)

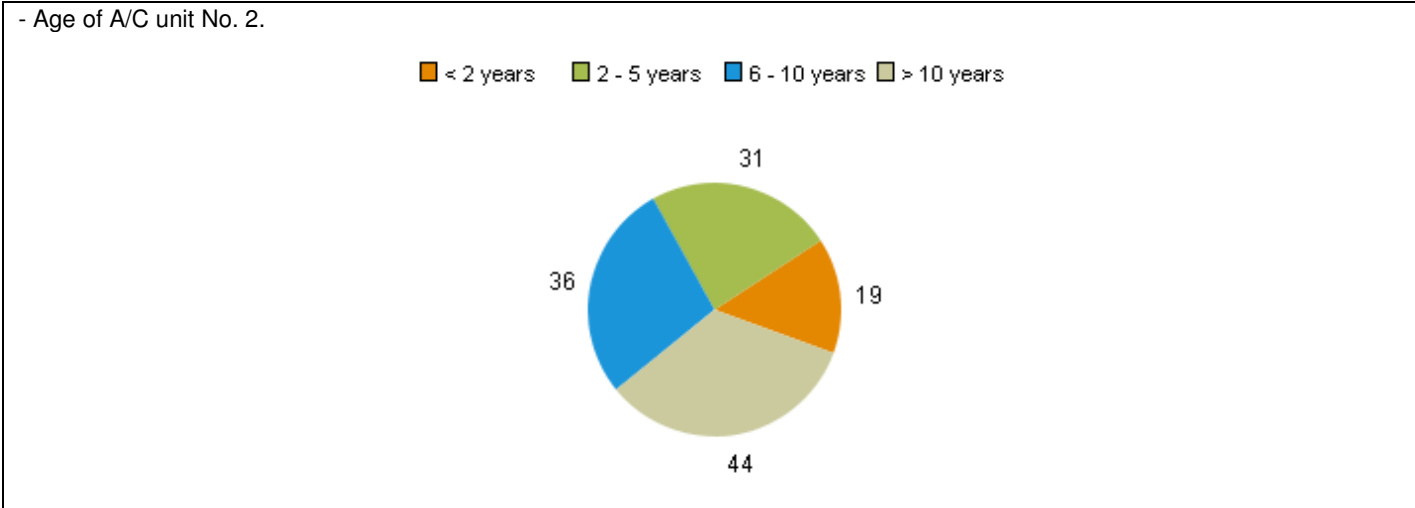
23.) How many permanent A/C units do you have?



- Age of A/C unit No. 1.

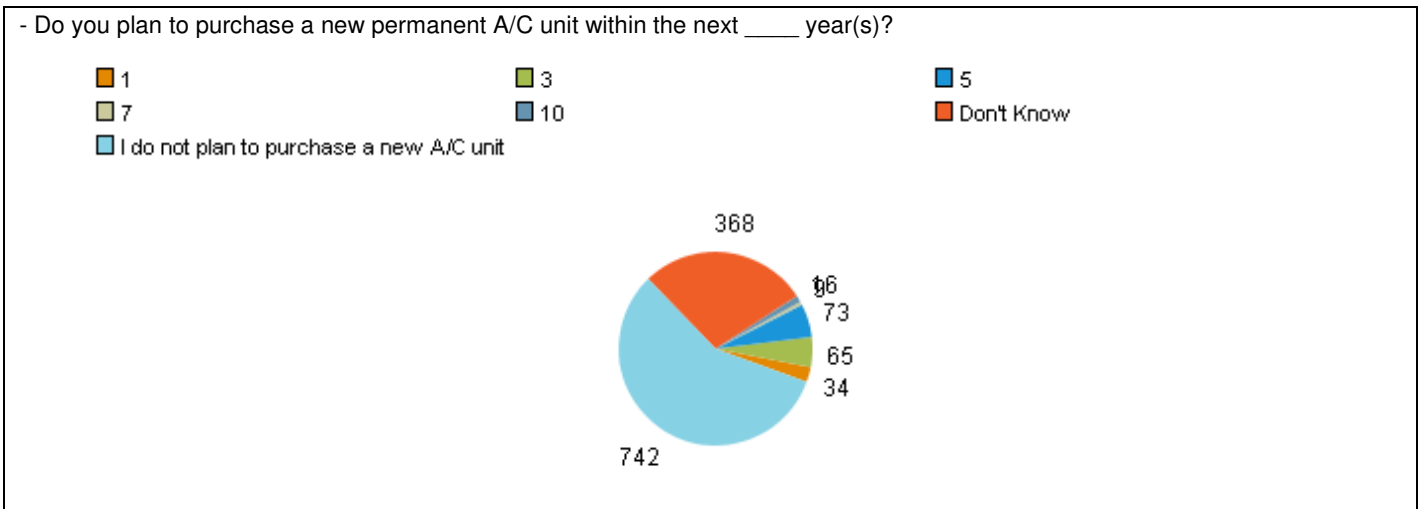
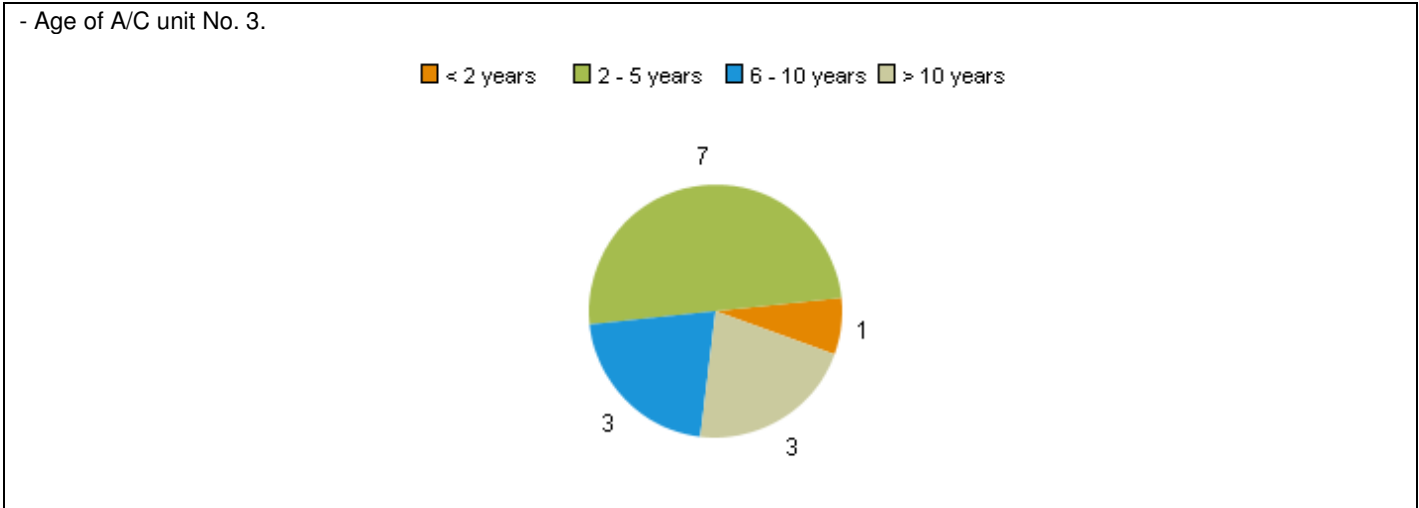


- Age of A/C unit No. 2.



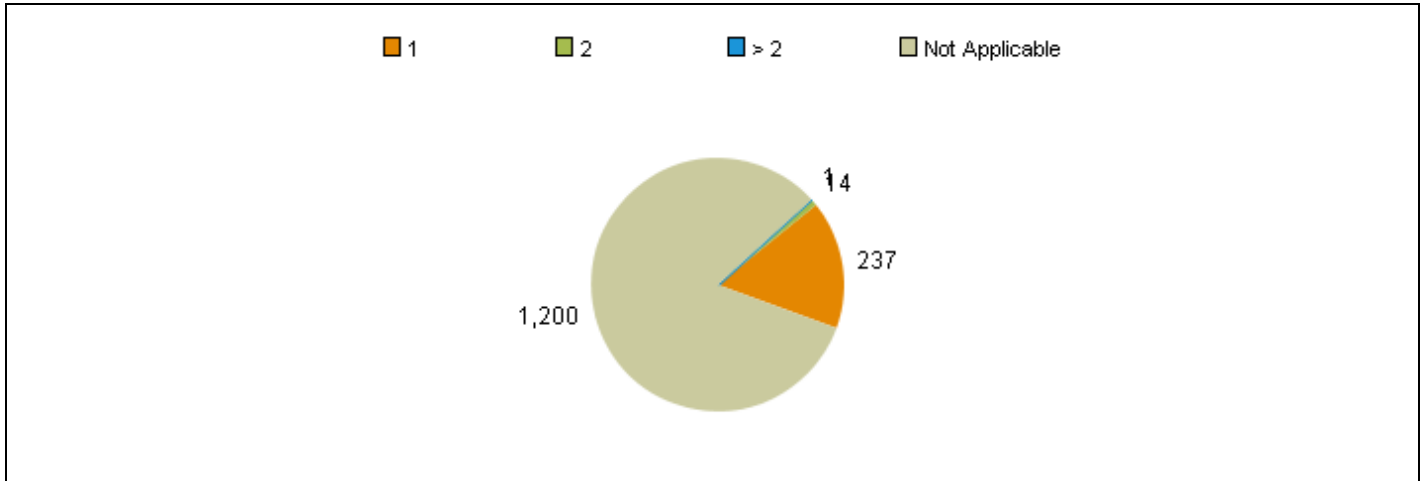
## Smart Sense Demographic Survey - All Customers – (Continued)

23.) How many permanent A/C units do you have? – (Continued)

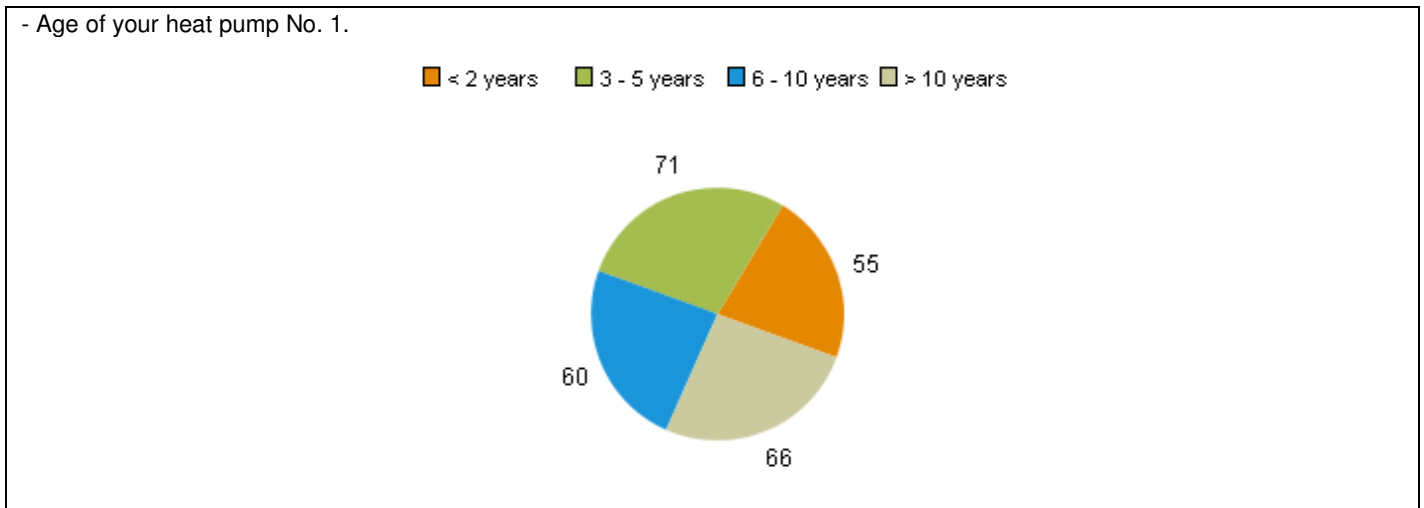


## Smart Sense Demographic Survey - All Customers – (Continued)

24.) How many heat pumps do you have?



- Age of your heat pump No. 1.





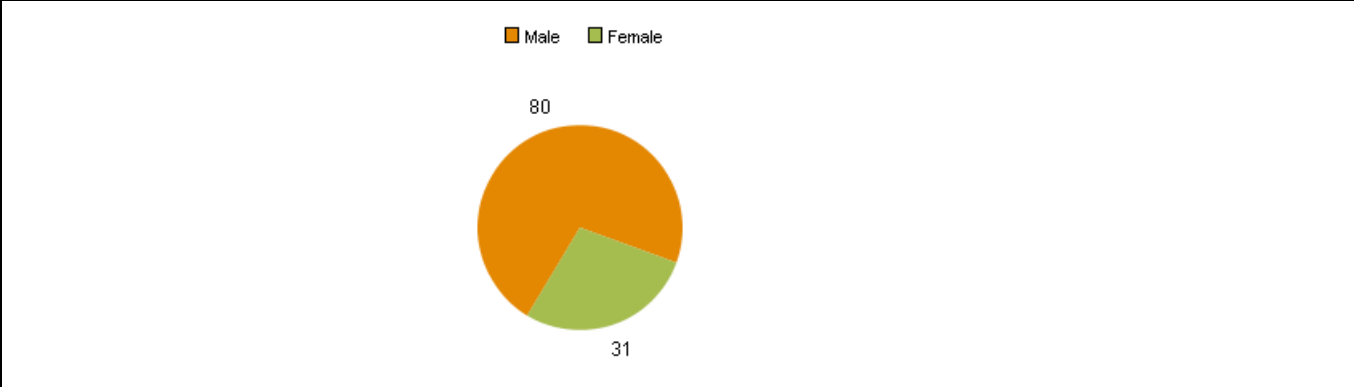


# **Attachment 9**

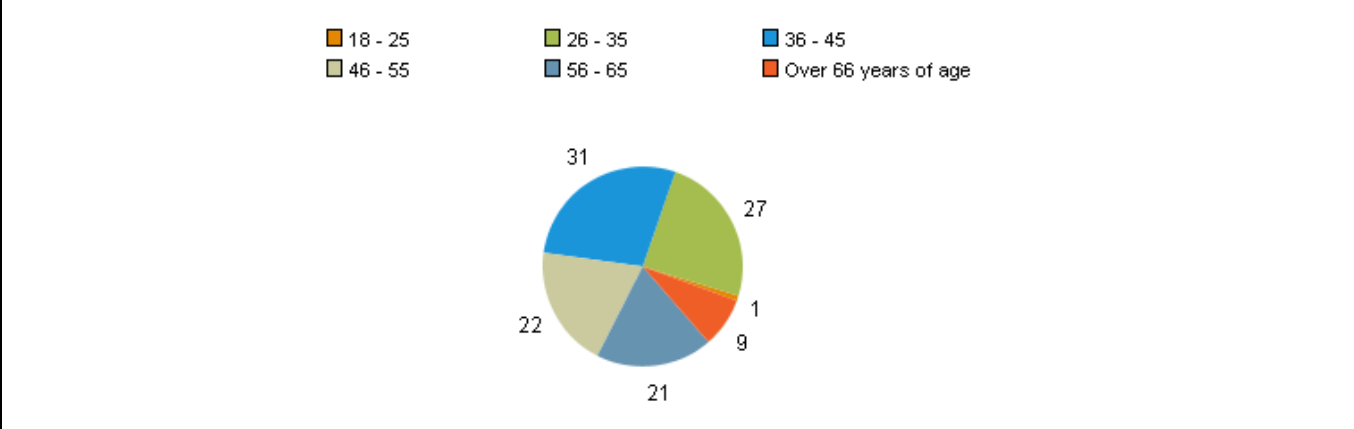
## **Demographic Statistics – TOD Customers**

# Smart Sense Demographic Survey - Time-of-Day Customers

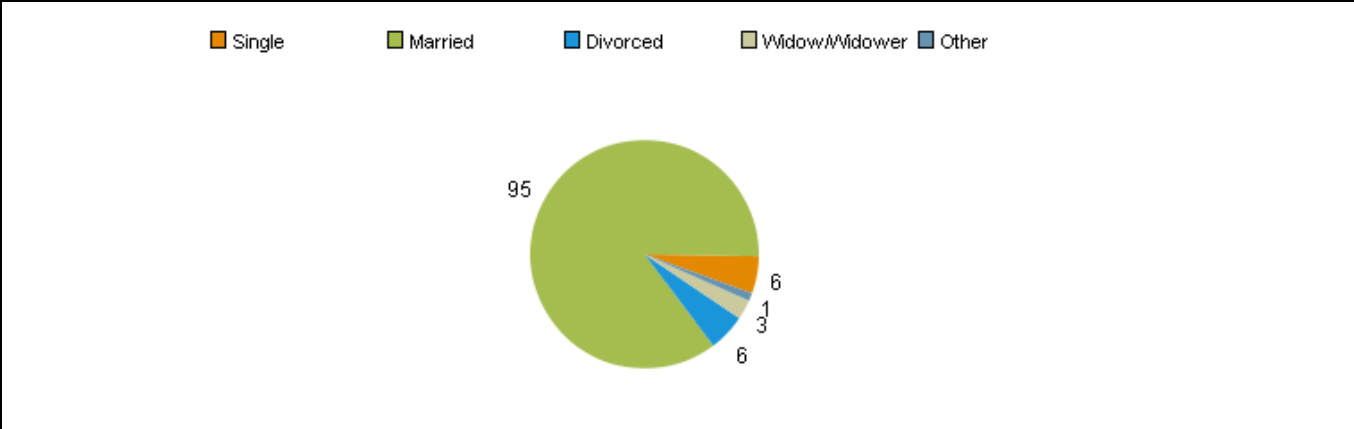
1.) What is your gender?



2.) What is your age?

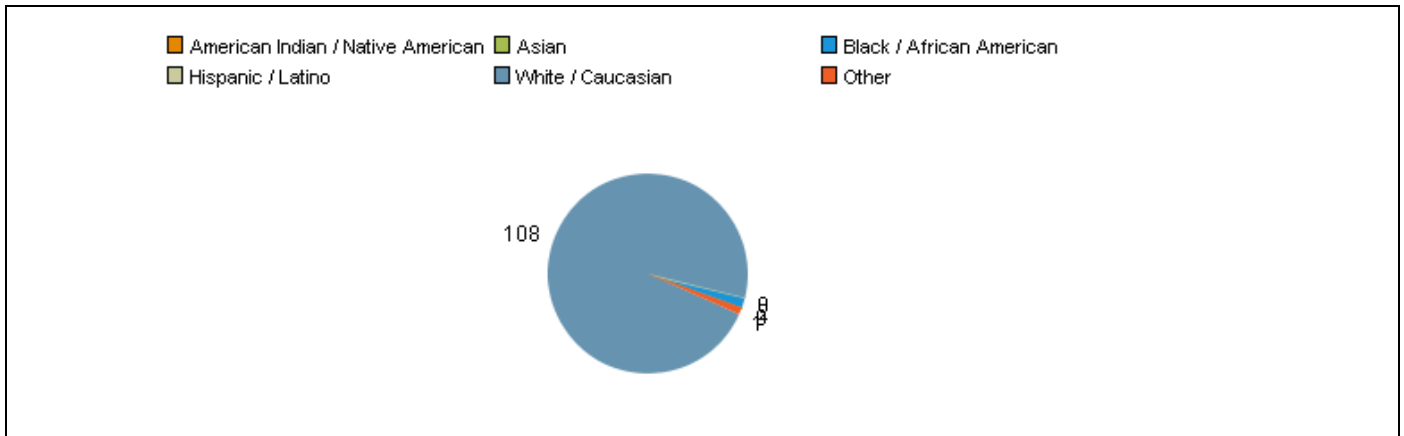


3.) What is your marital status?

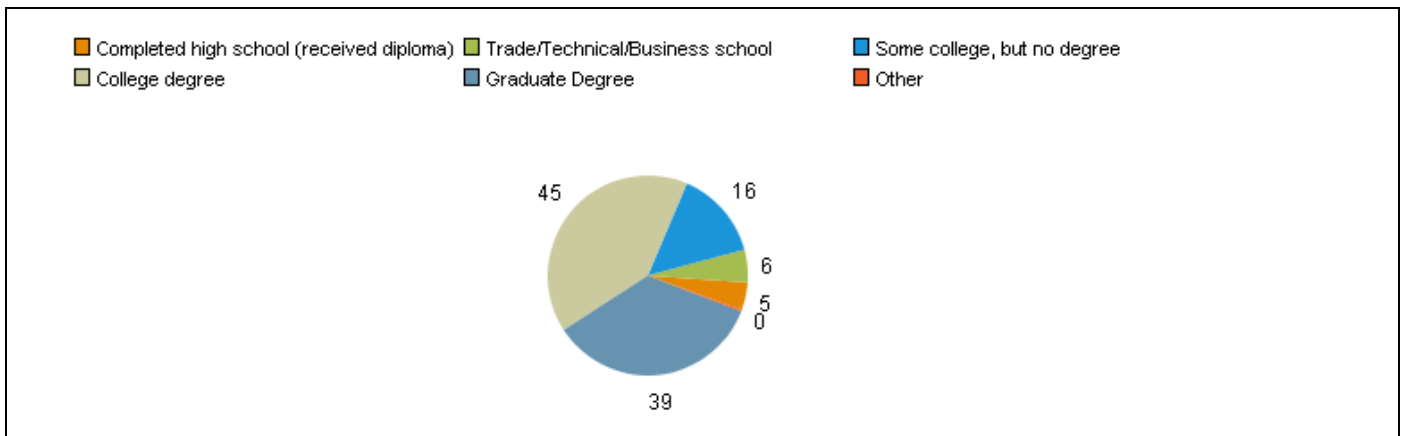


## Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

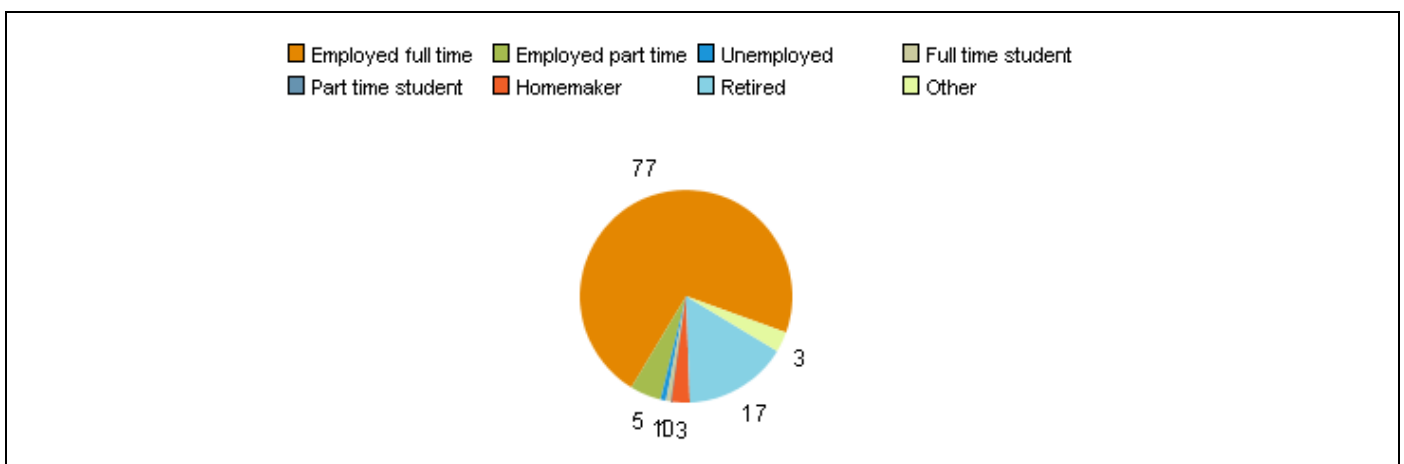
4.) How would you describe your race?



5.) What is the highest level of education that you've completed?

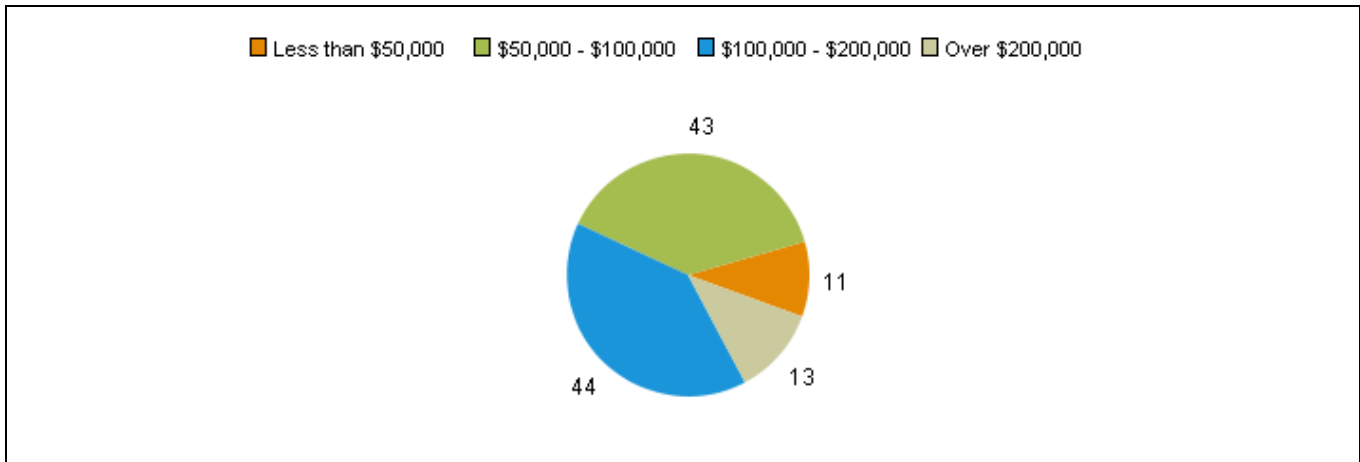


6.) How would you describe your current employment status? (Please check all that may apply.)

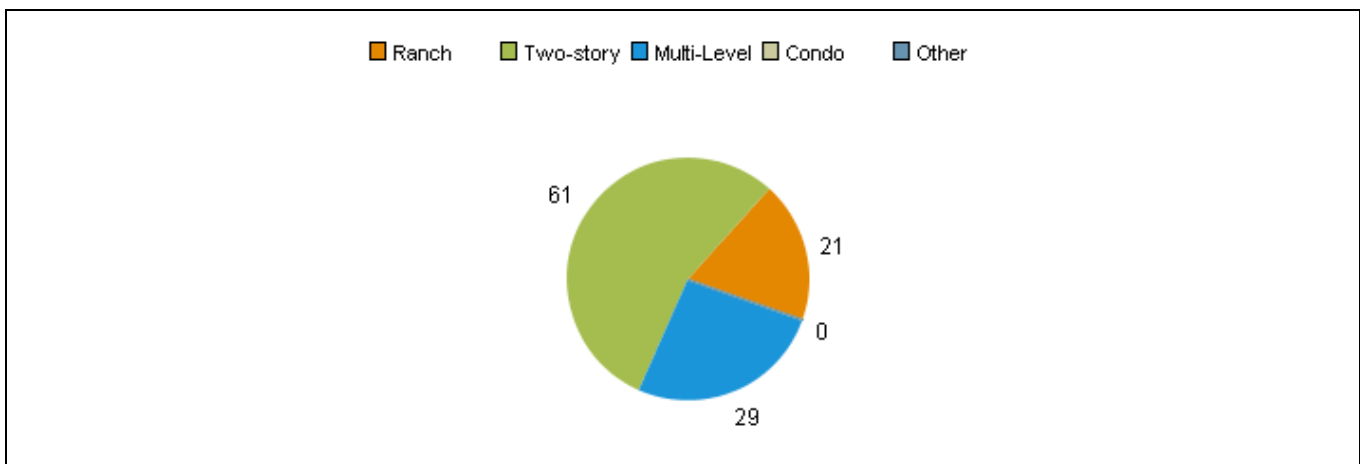


## Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

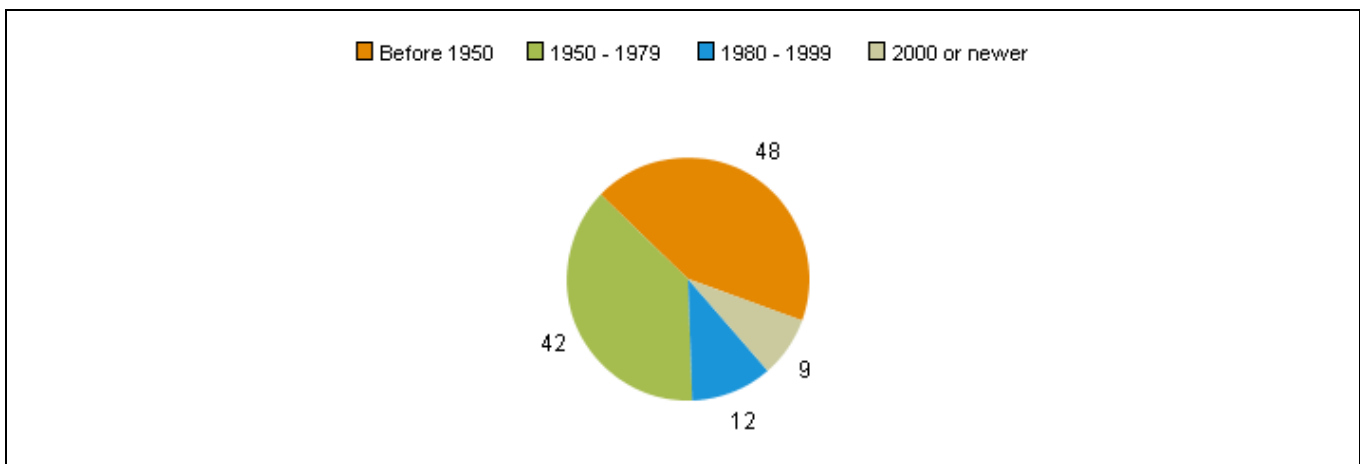
7.) What was your household's annual income for 2010?



8.) Do you live in a:

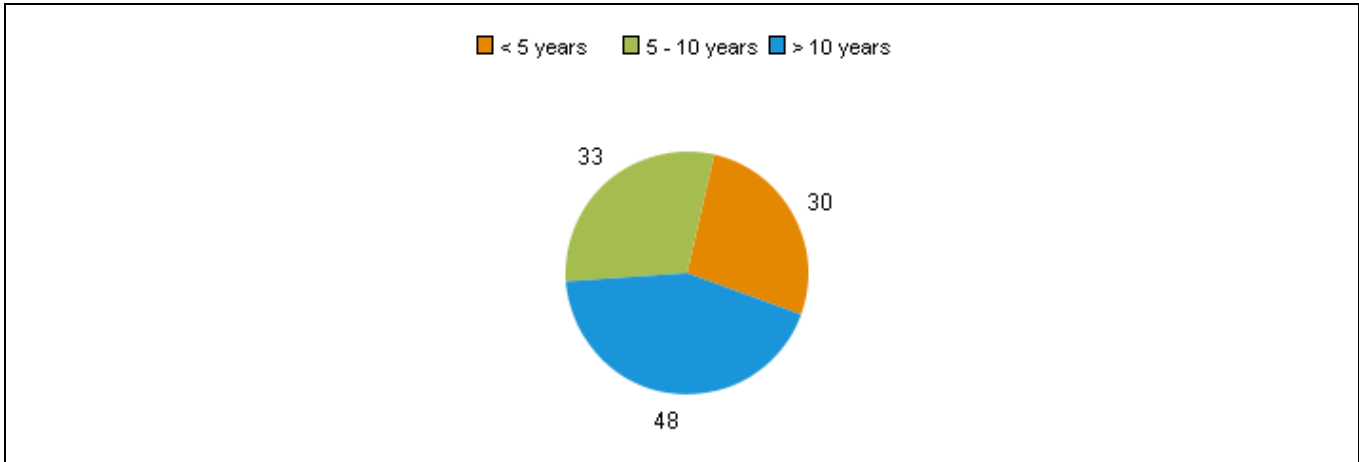


9.) What year was your home built?

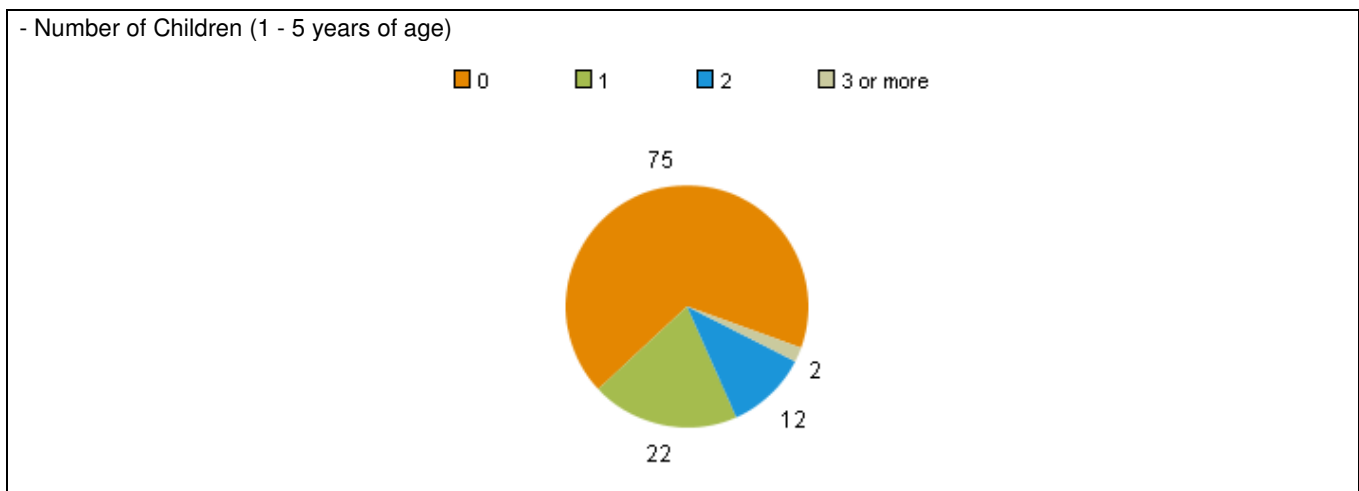
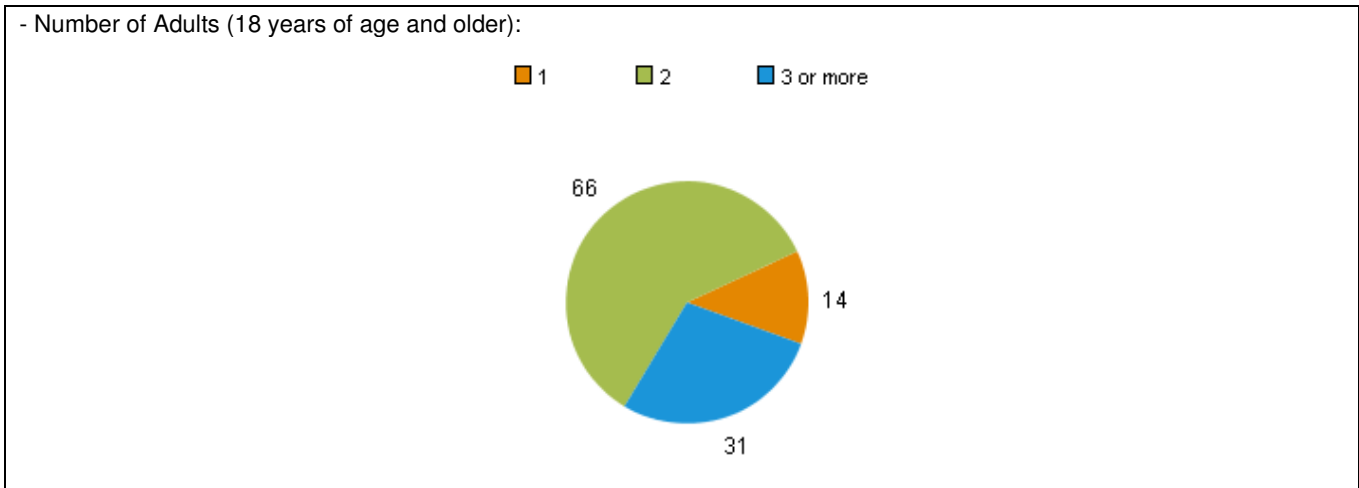


# Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

10.) How long have you lived at this residence?

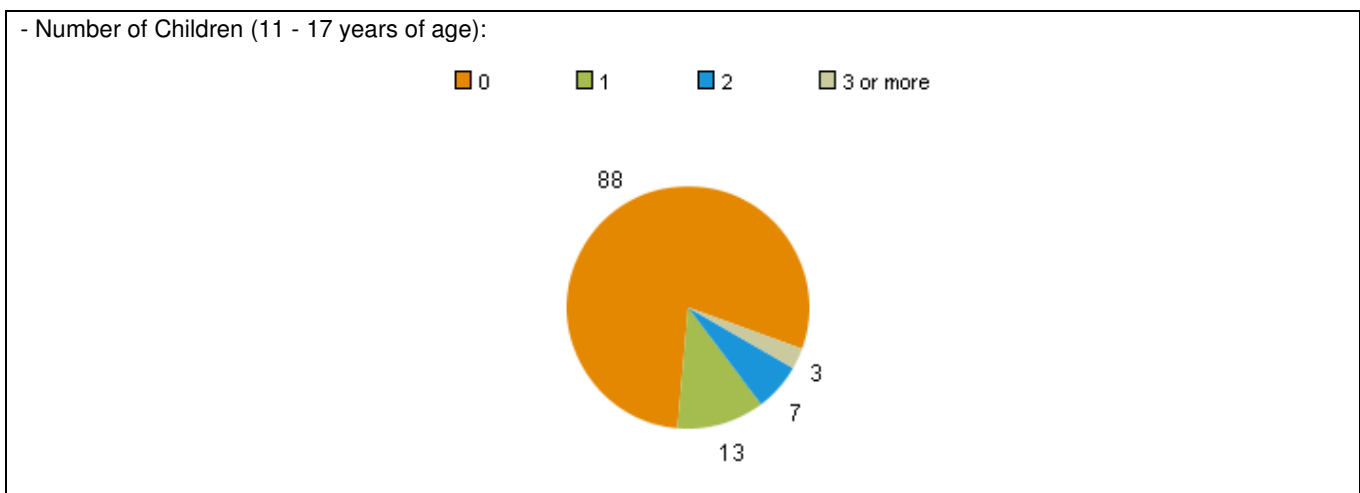
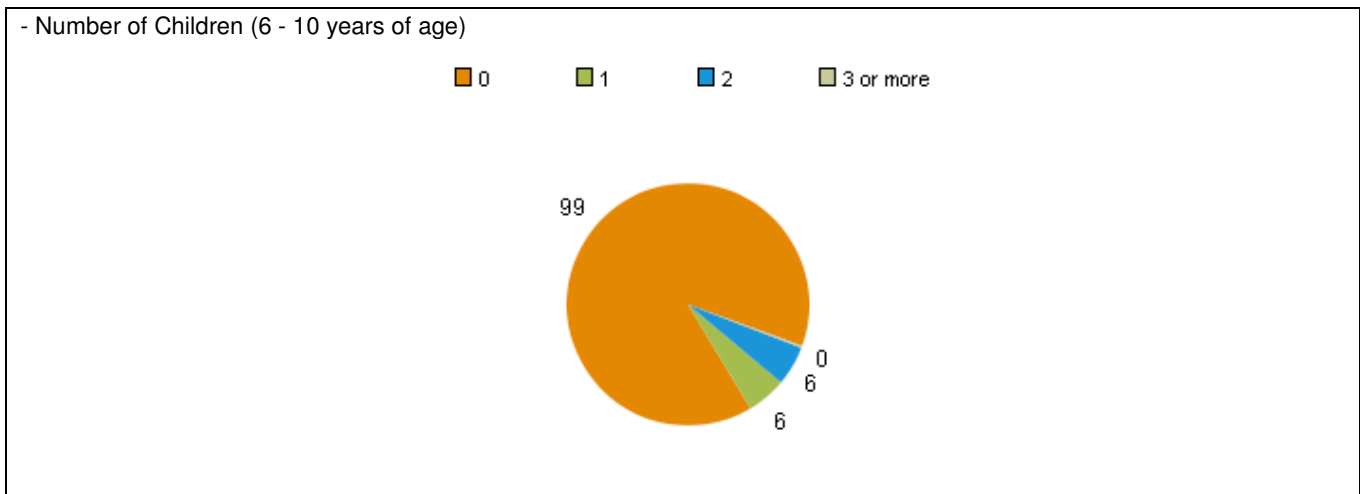


11.) Including you, how many people live in your home? (Please select an answer from each drop down list below.)

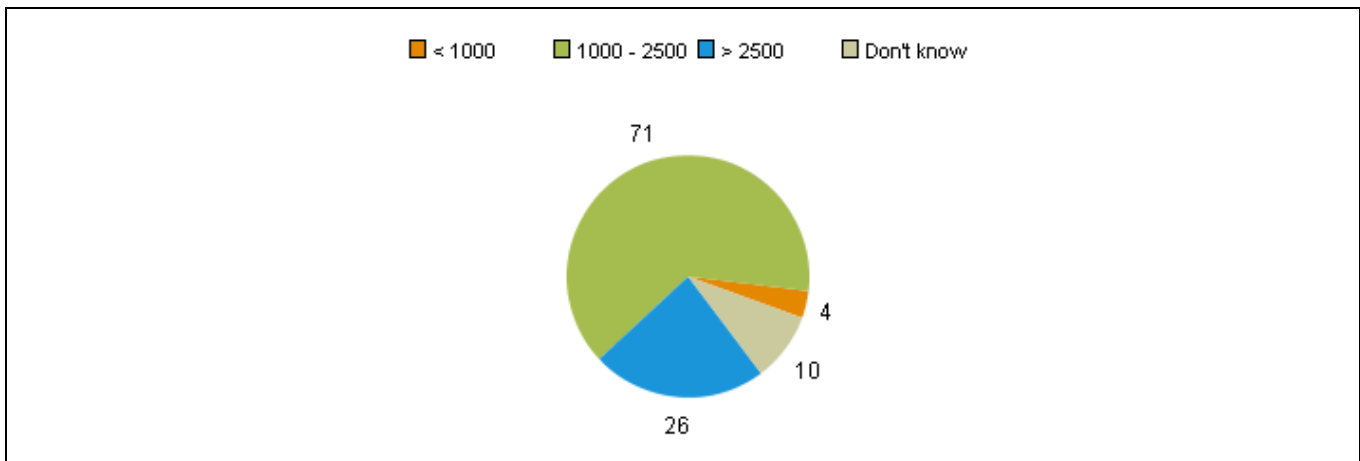


## Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

11.) Including you, how many people live in your home? (Please select an answer from each drop down list below.) – (Continued)

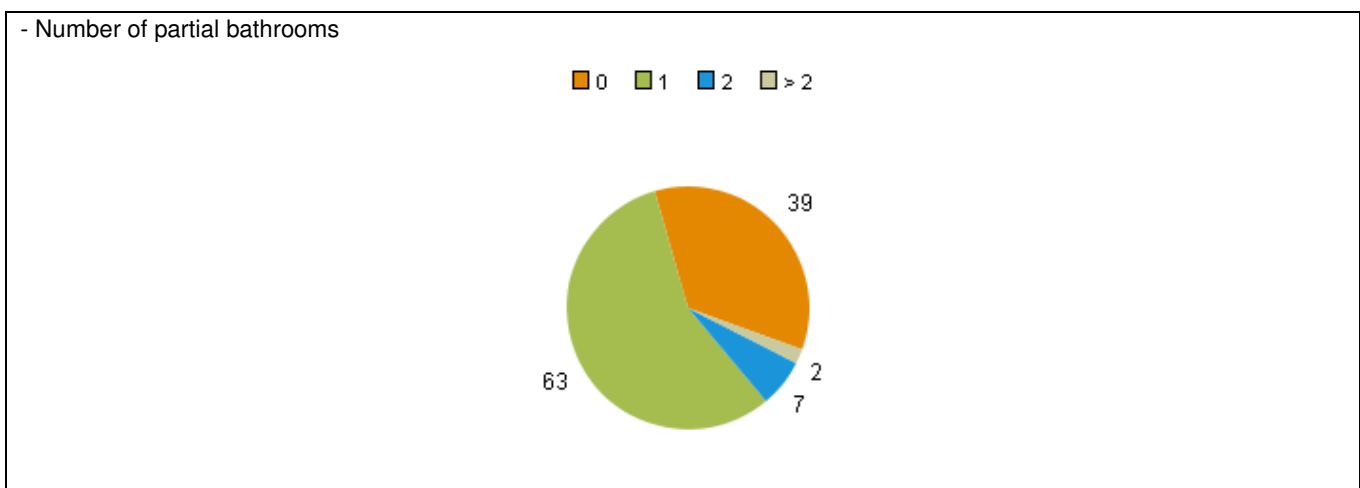
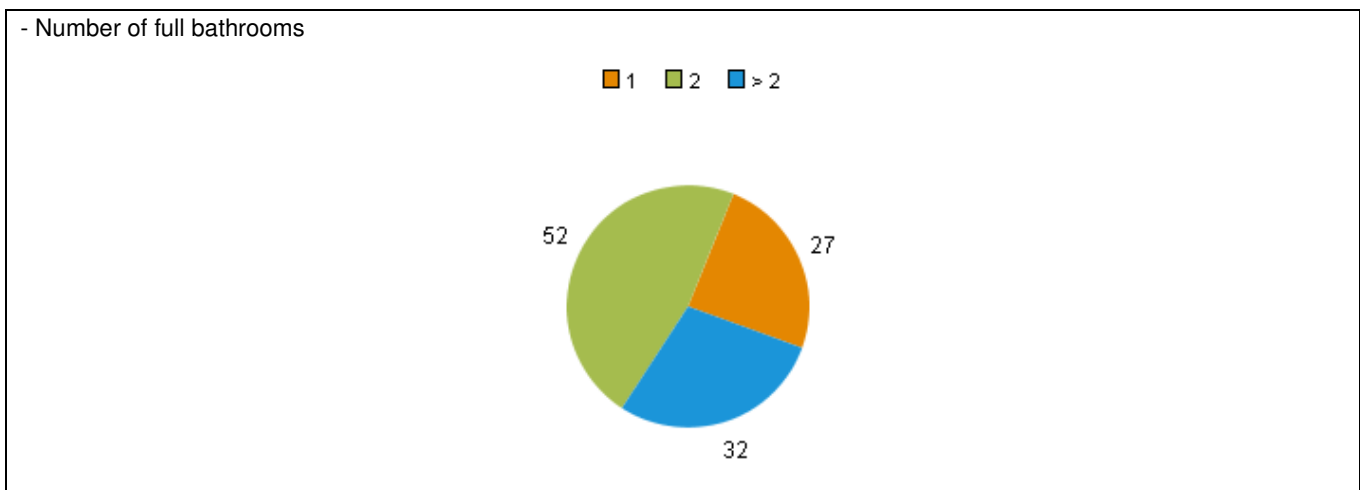
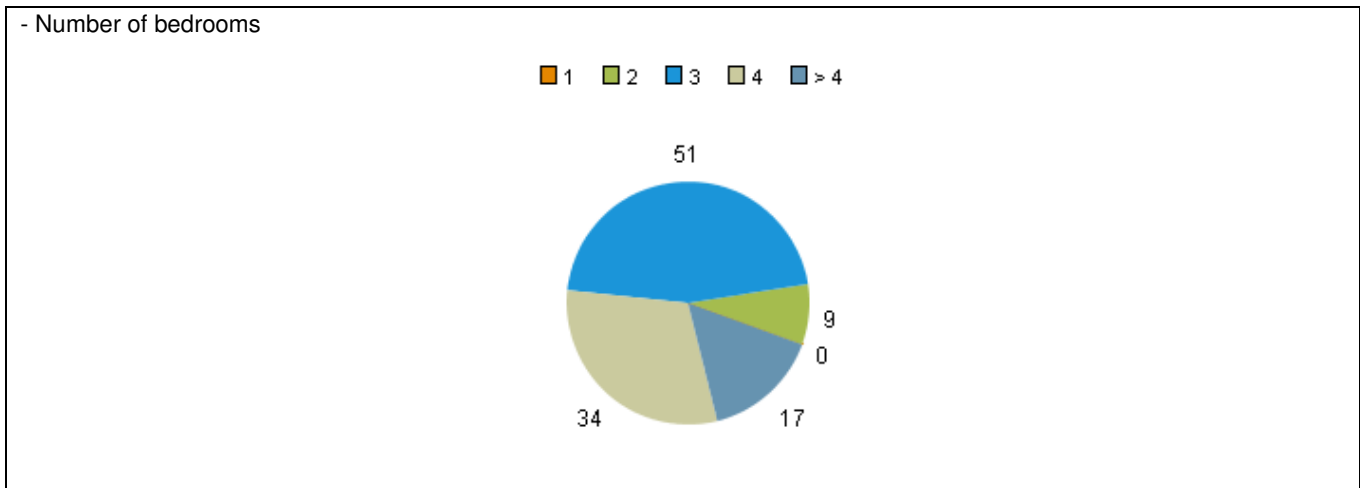


12.) What is your home's square footage of living space?



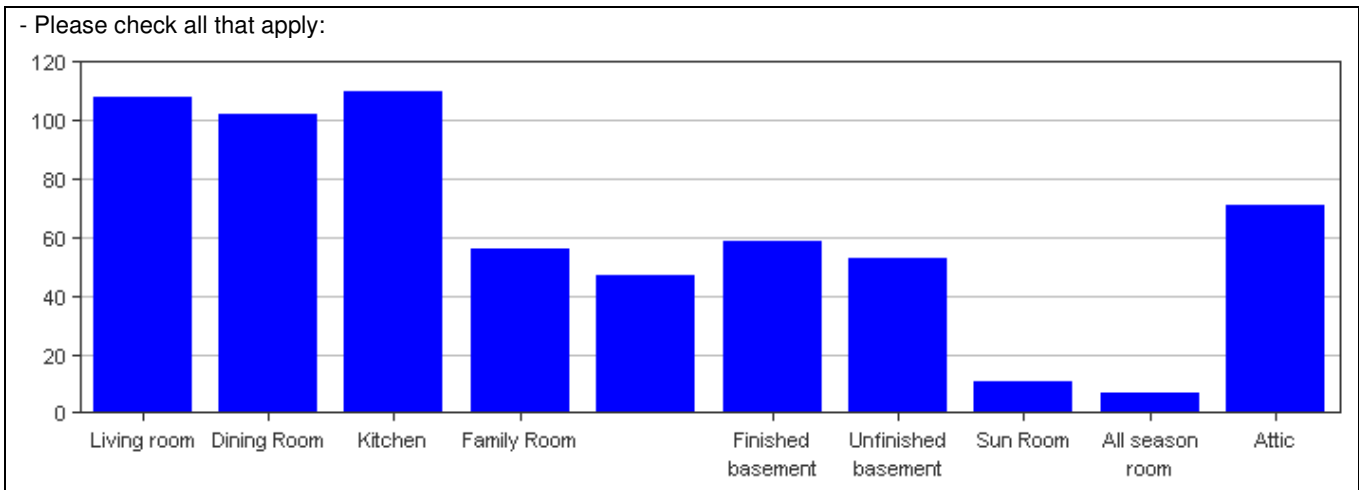
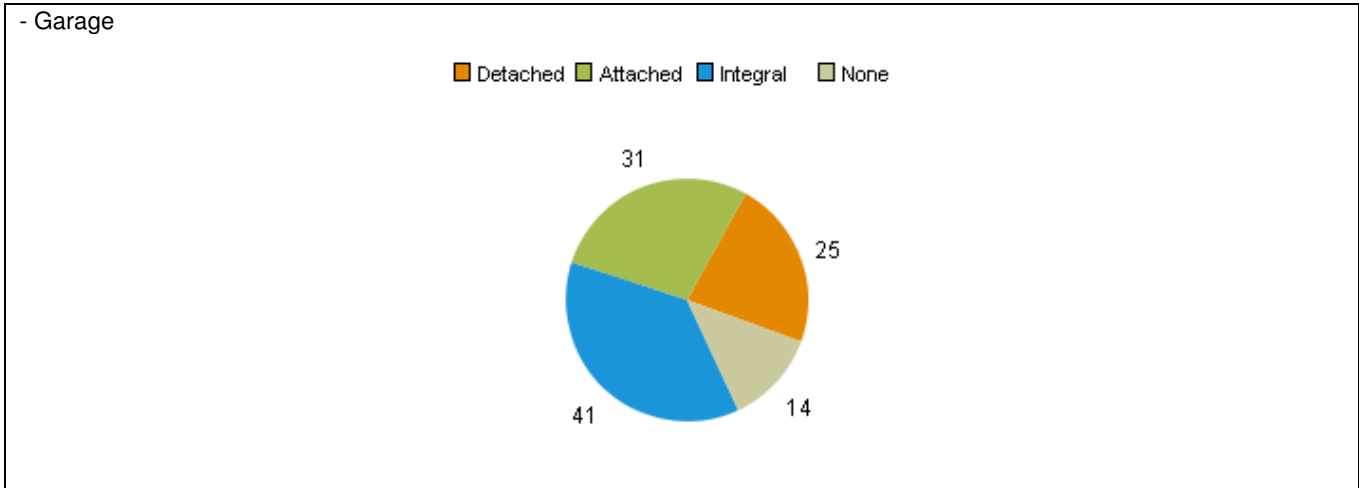
## Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

13.) How many rooms does your home have? Please count living areas and bath rooms, but skip closets and hallways. (Please select an answer from each drop down list below.)



## Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

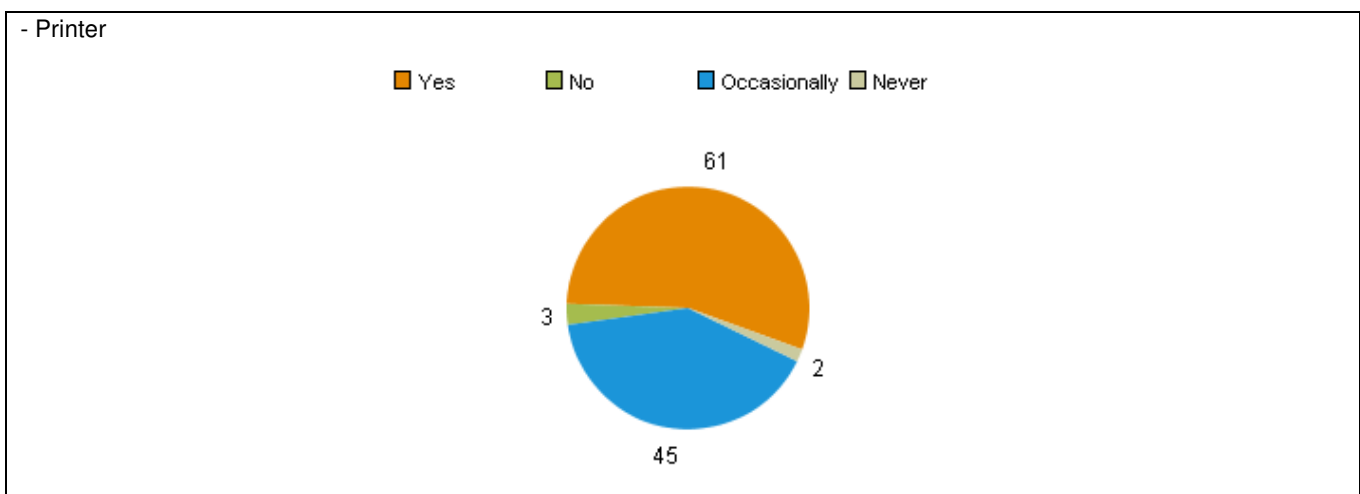
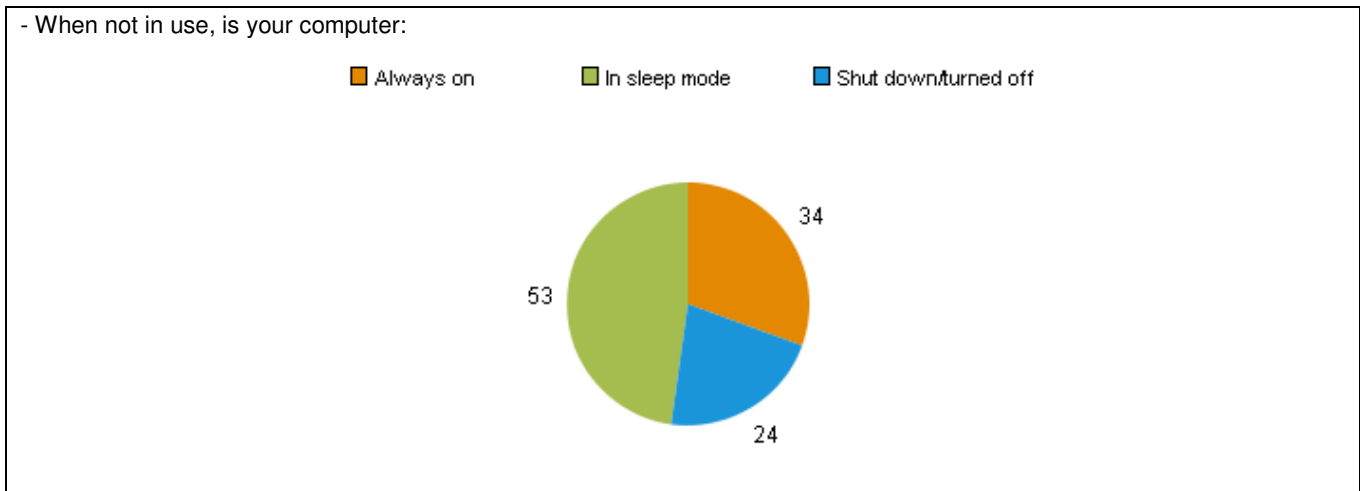
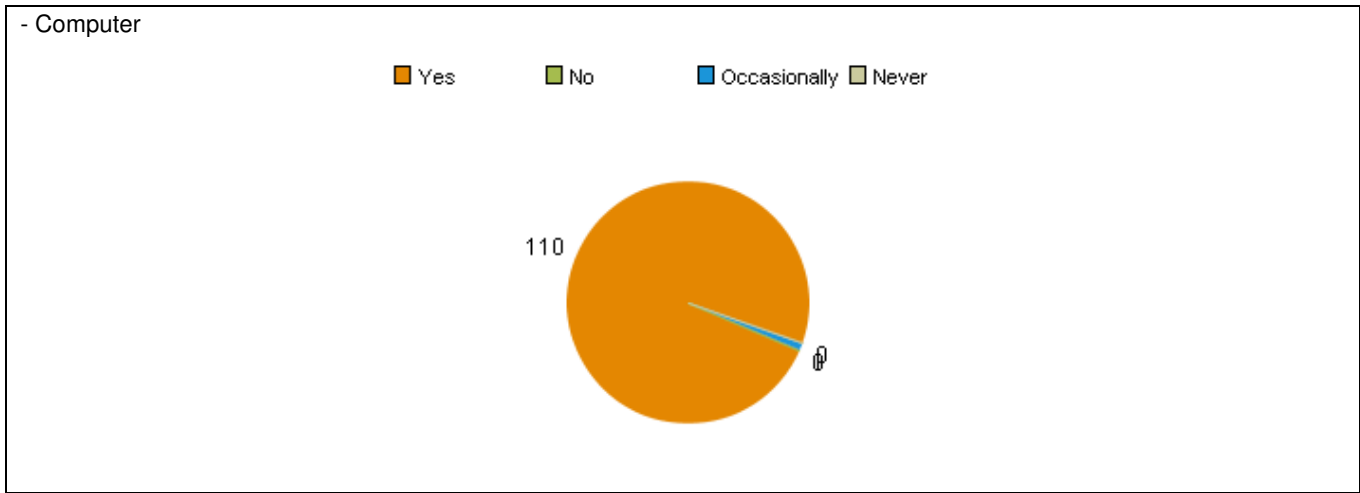
13.) How many rooms does your home have? Please count living areas and bath rooms, but skip closets and hallways. (Please select an answer from each drop down list below.) – (Continued)





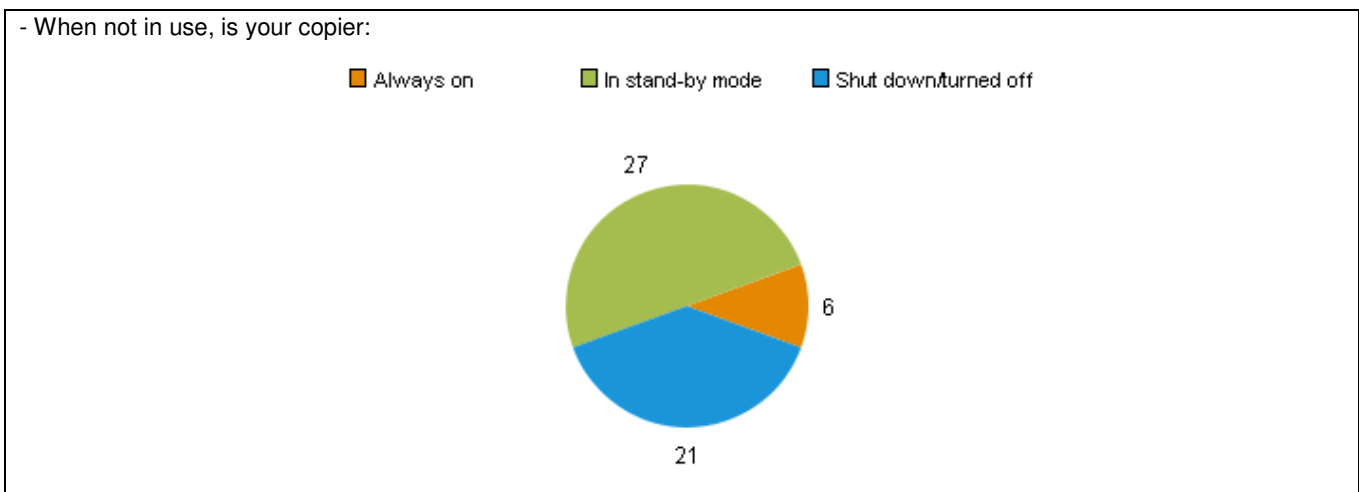
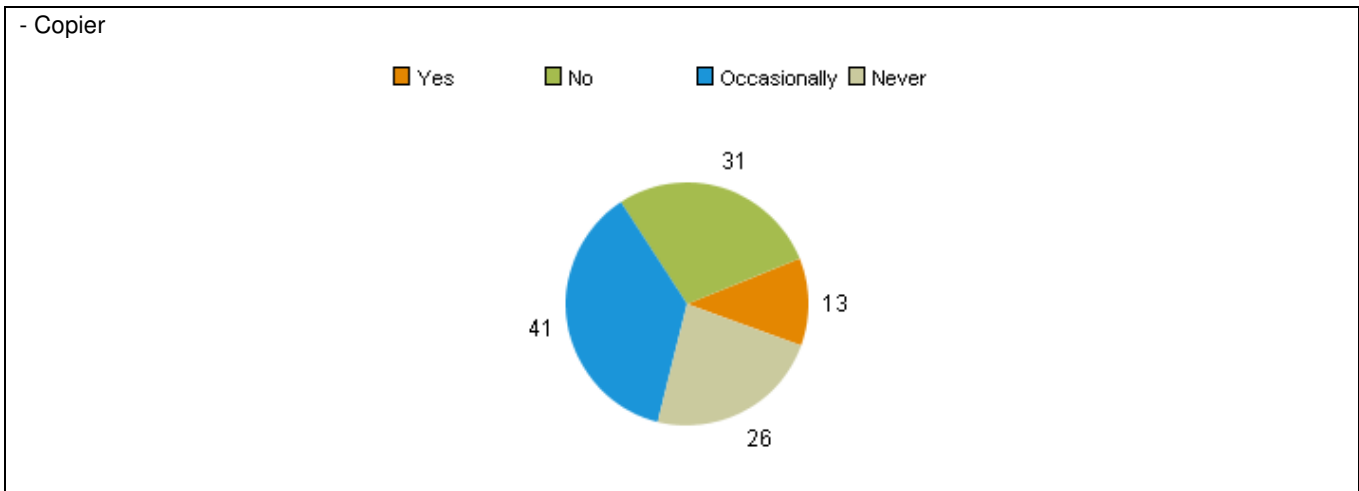
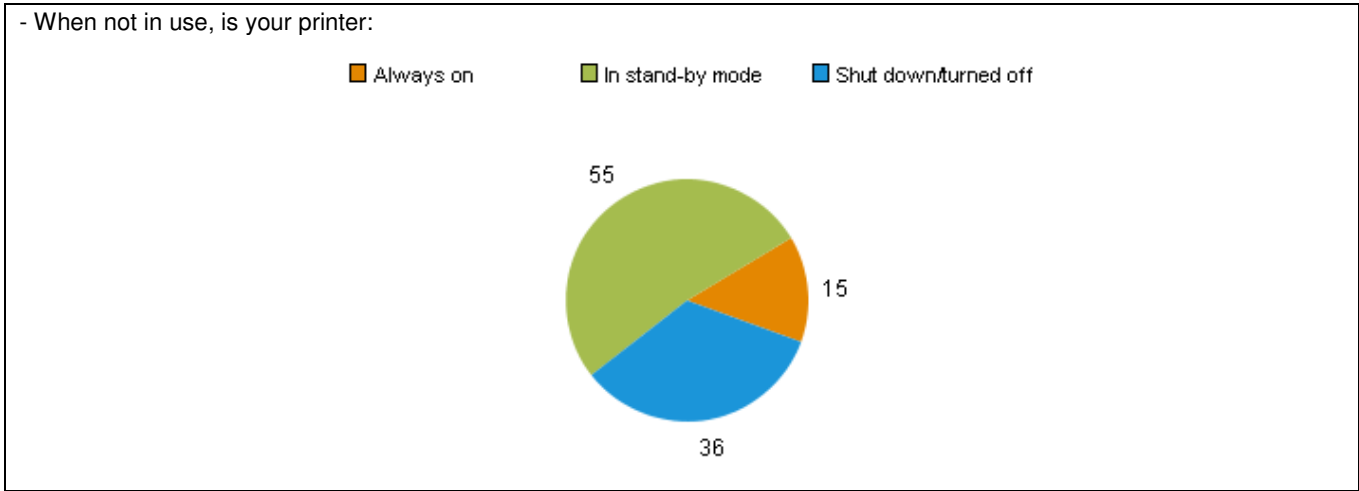
# Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

14.) Do you use any of the following equipment on a daily basis:



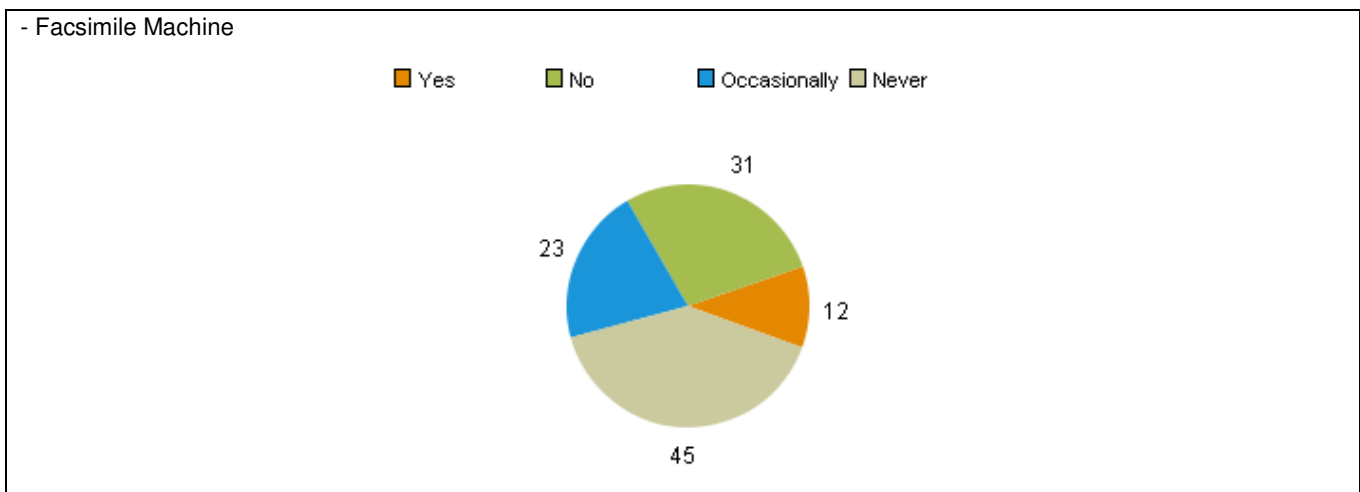
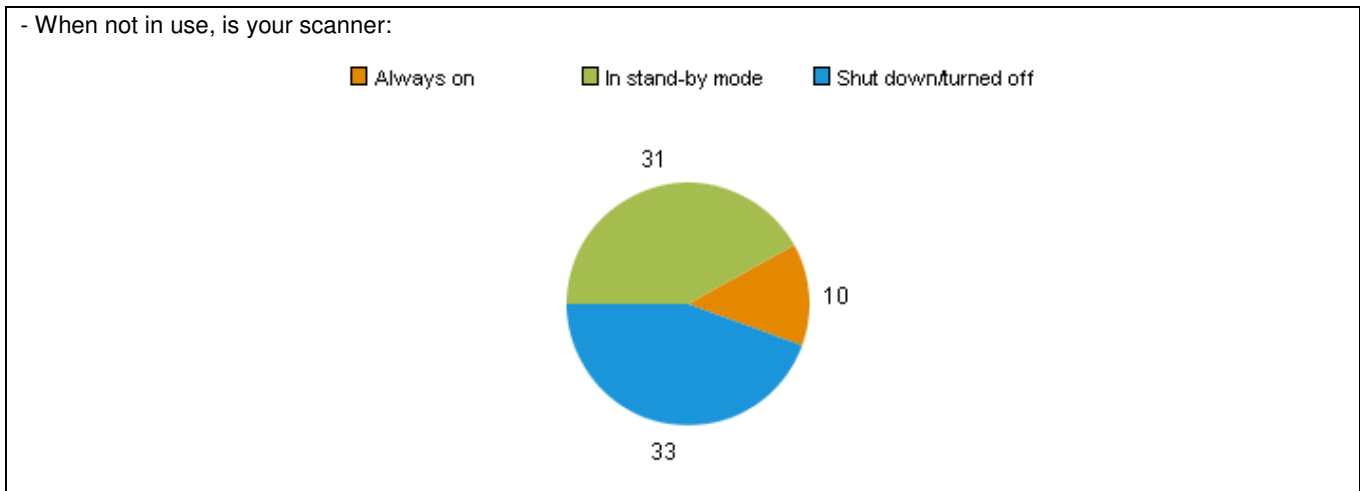
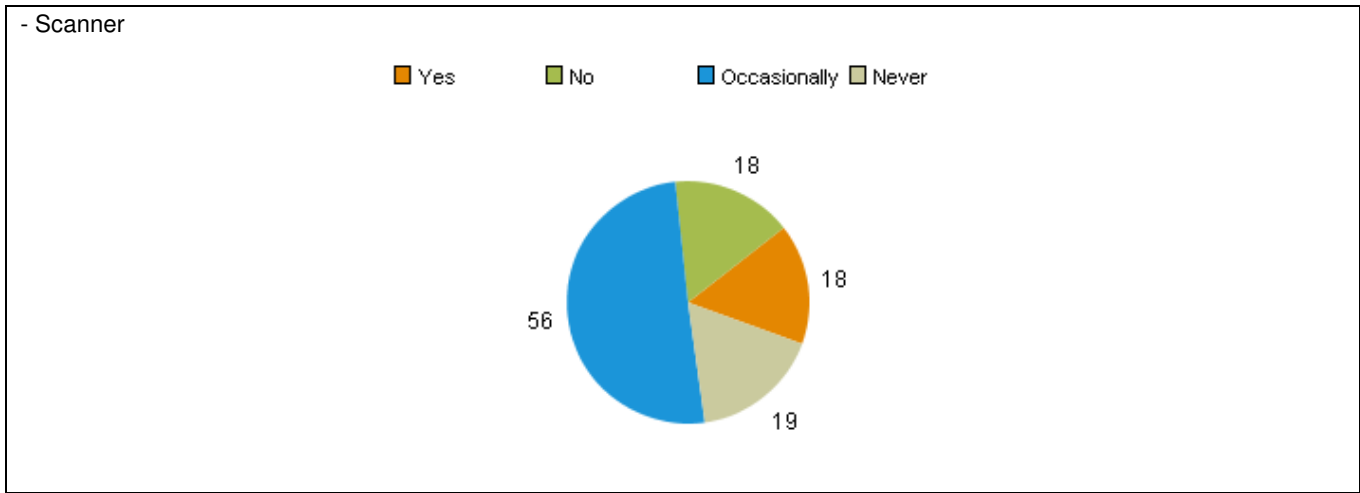
# Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

14.) Do you use any of the following equipment on a daily basis: - (Continued)



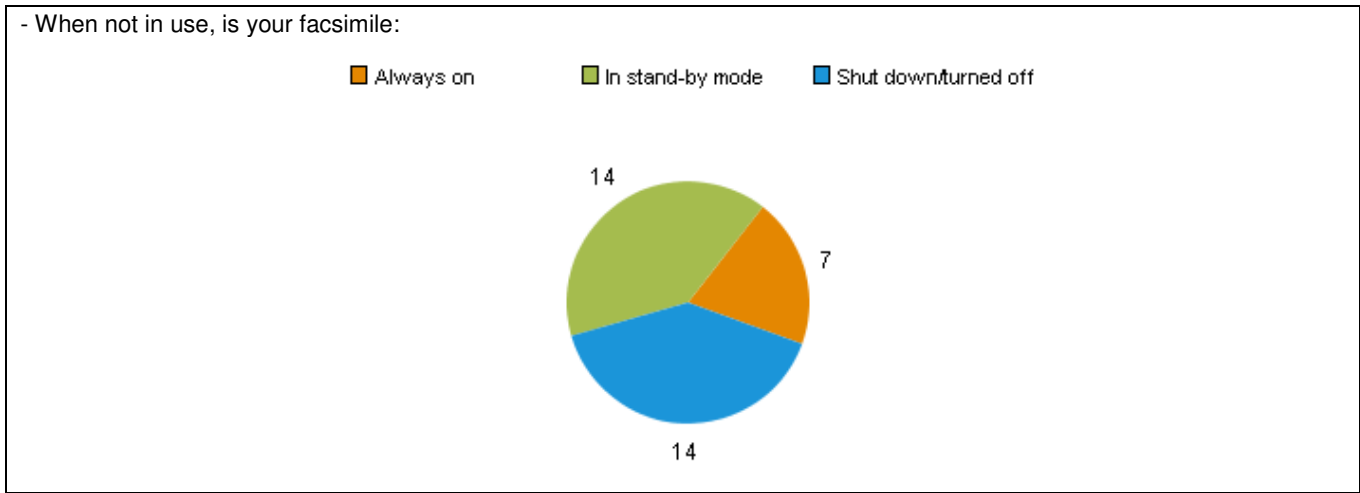
## Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

14.) Do you use any of the following equipment on a daily basis: - (Continued)

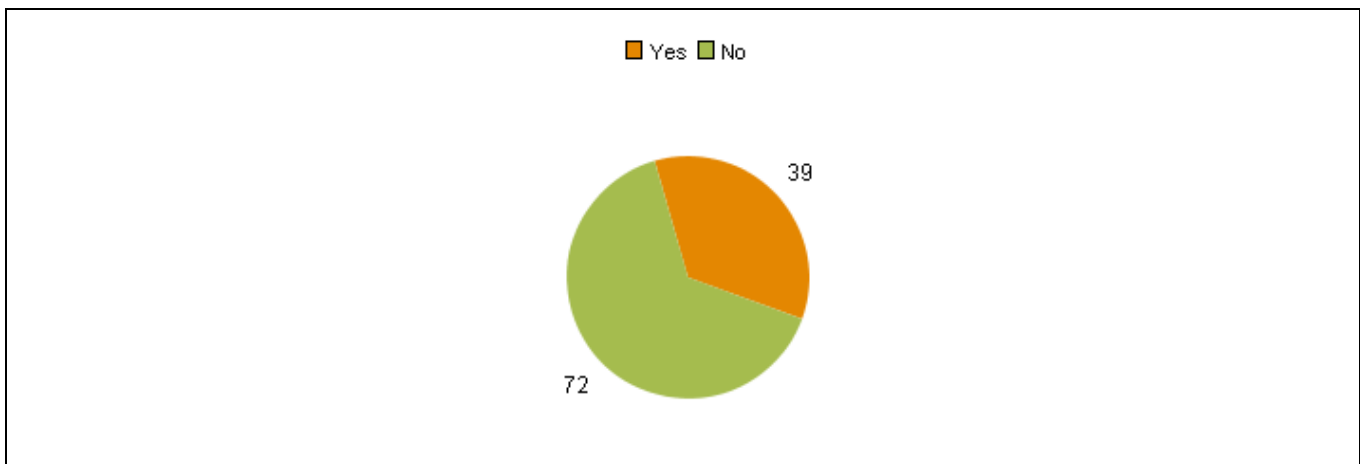


## Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

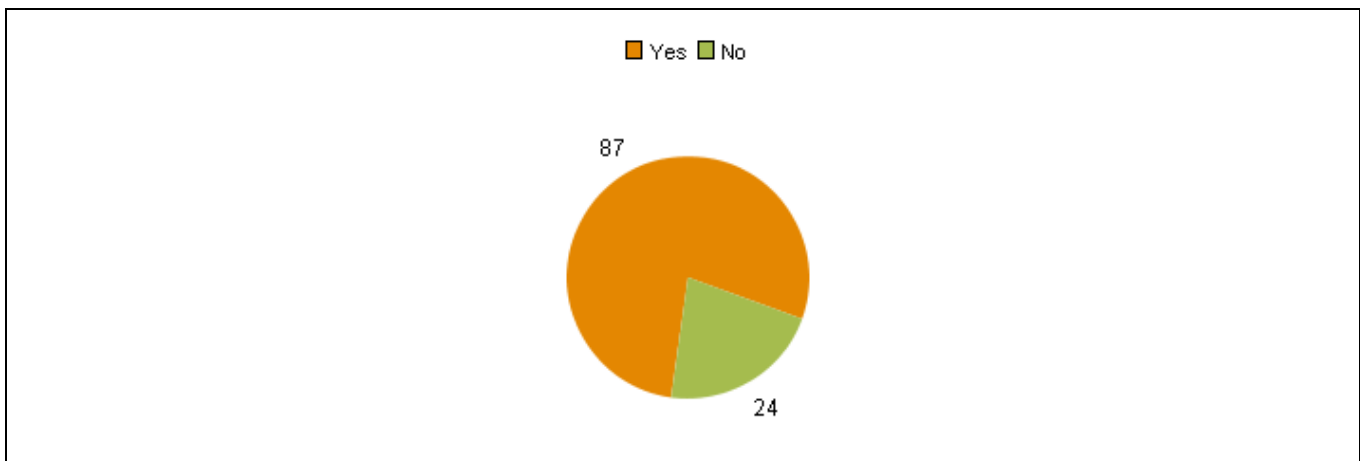
14.) Do you use any of the following equipment on a daily basis: - (Continued)



15.) Do you have an attic fan?

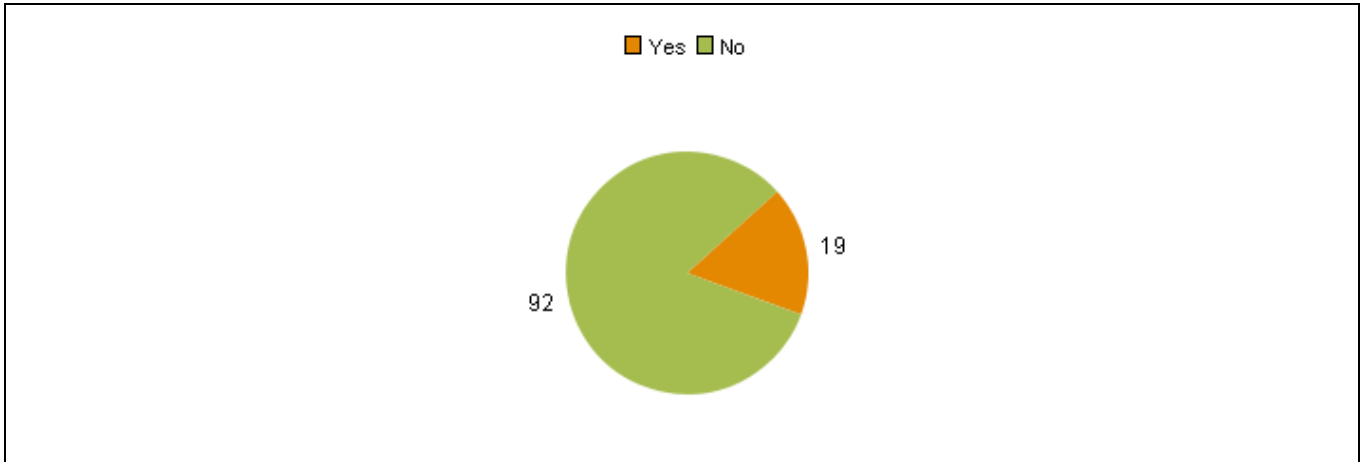


16.) Are there ceiling fans installed in your home?

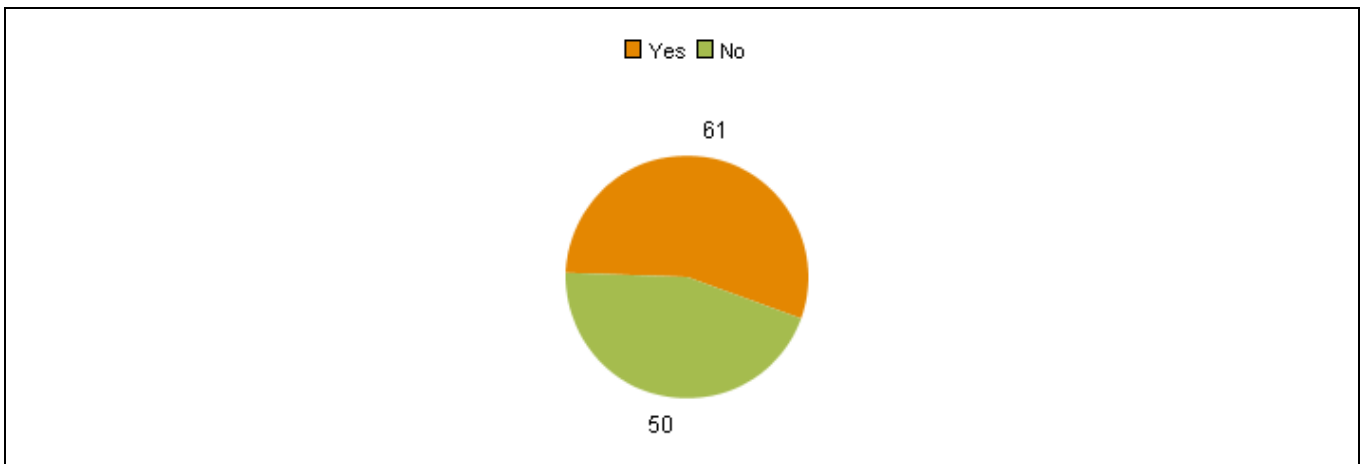


## Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

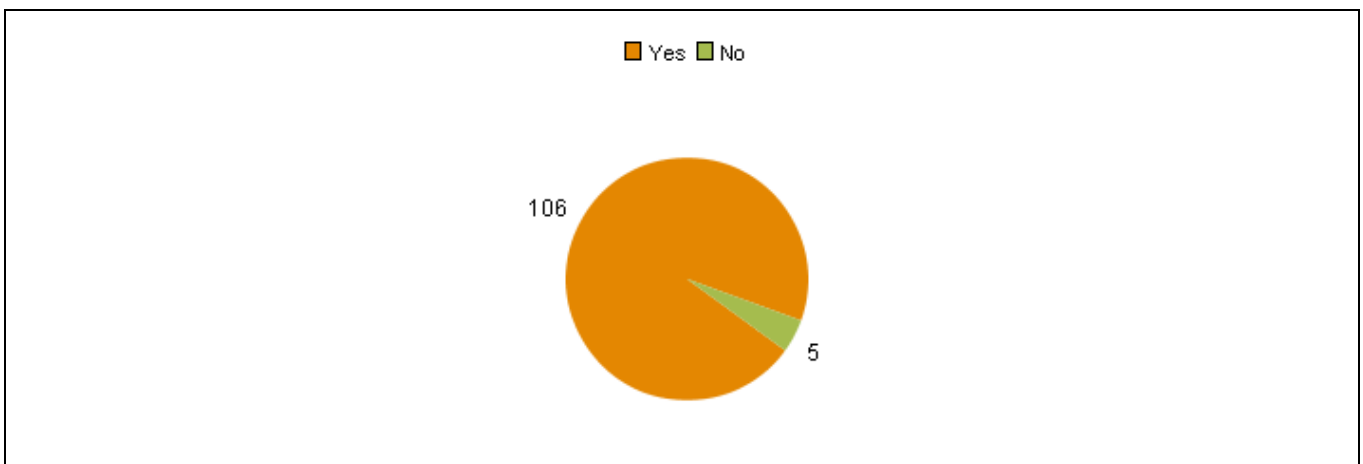
17.) Do you have an electric hot water heater?



18.) Do you have an electric clothes dryer?

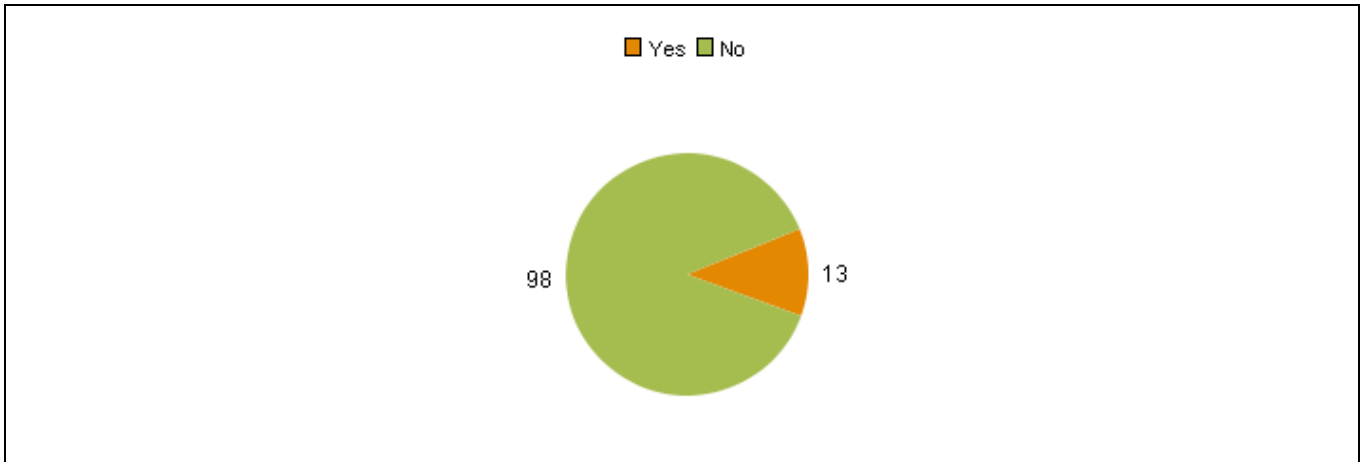


19.) Do you have a dishwasher?

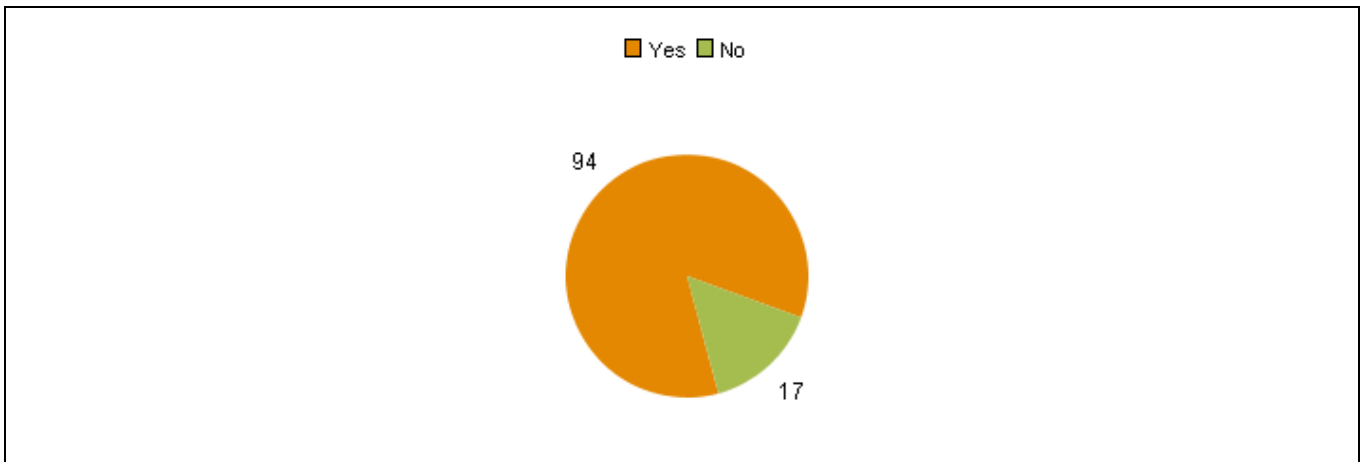


## Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

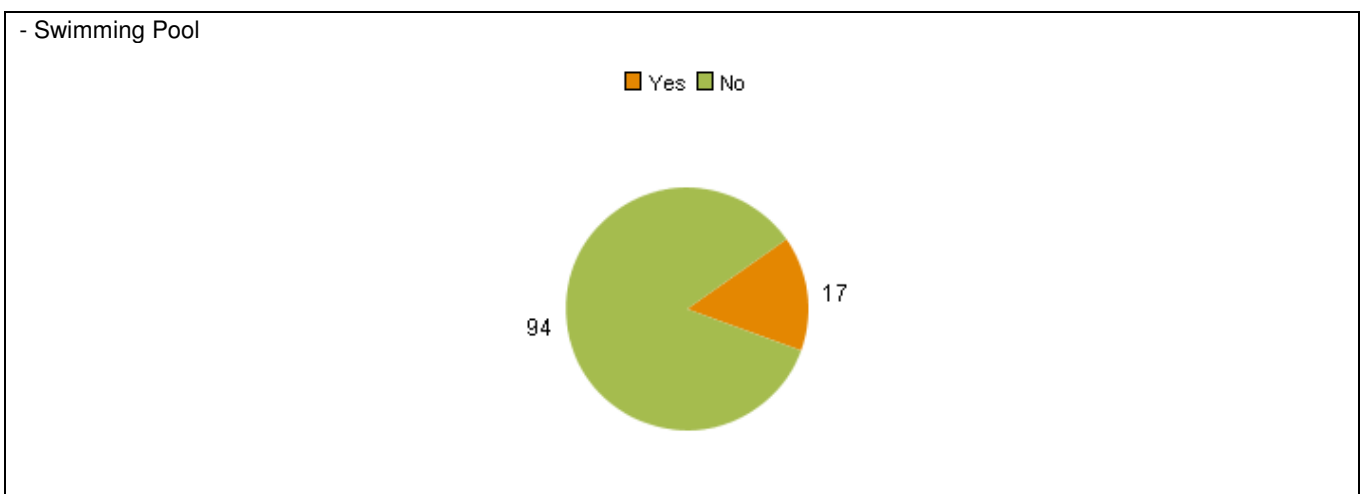
20.) Do you have any window A/C units?



21.) Is there a programmable thermostat installed at your home?

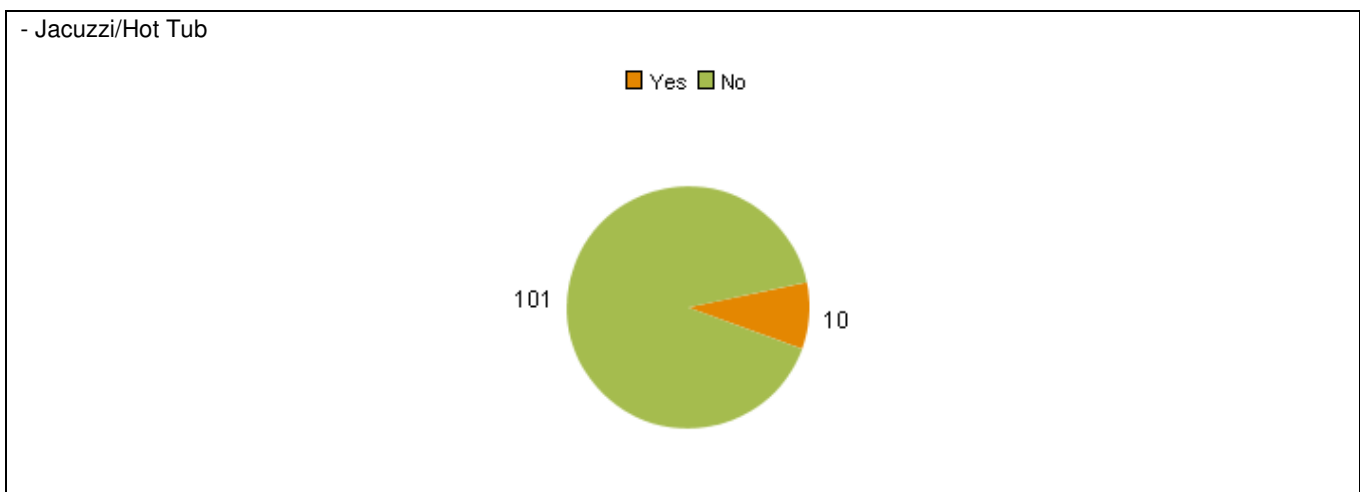
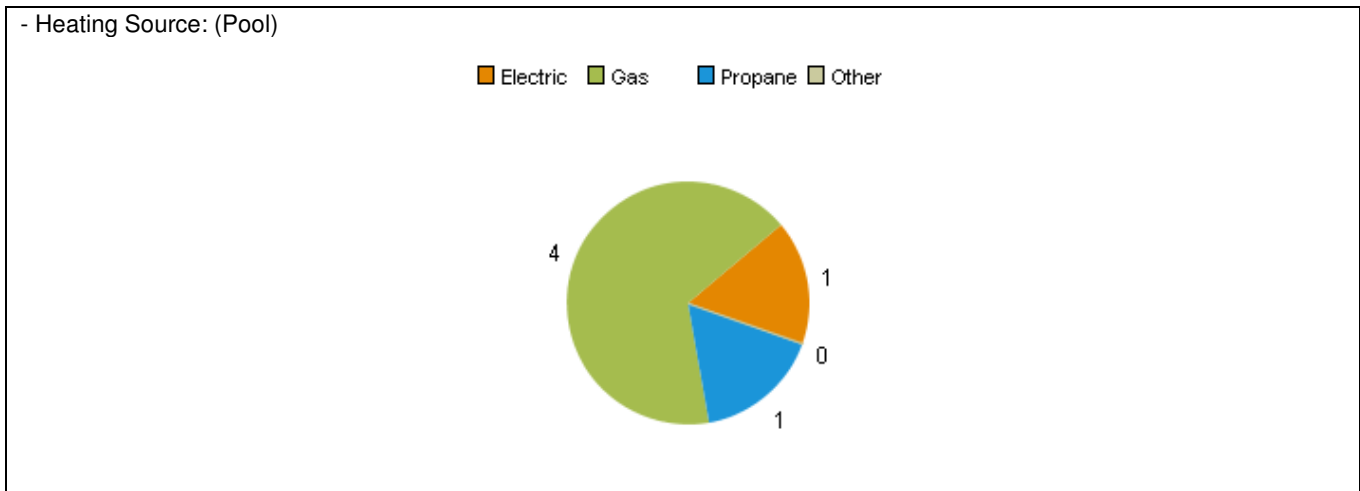
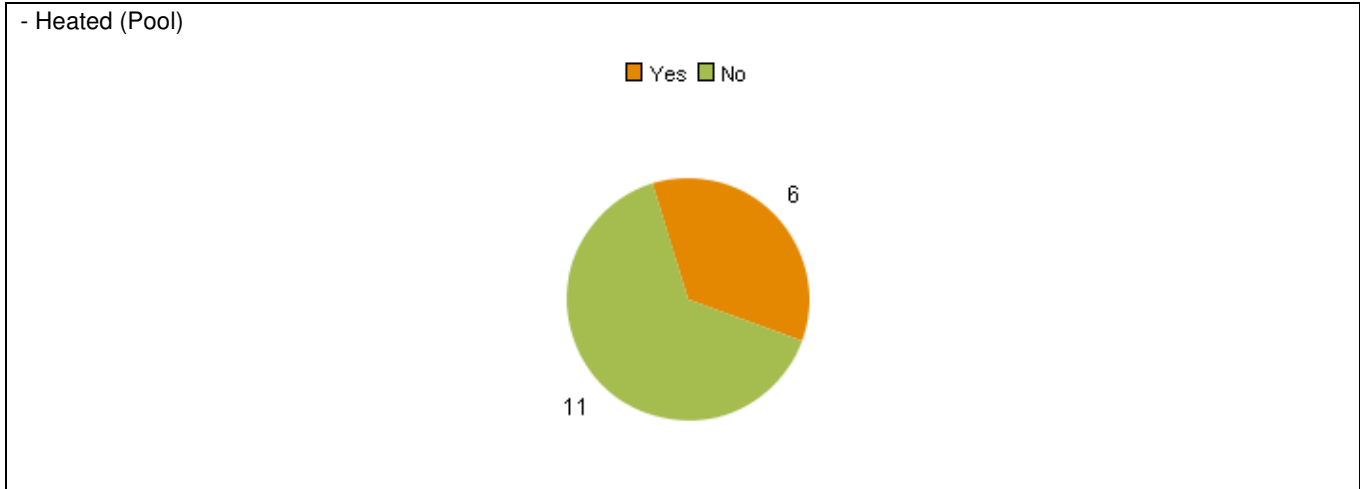


22.) Do you have any of the following:



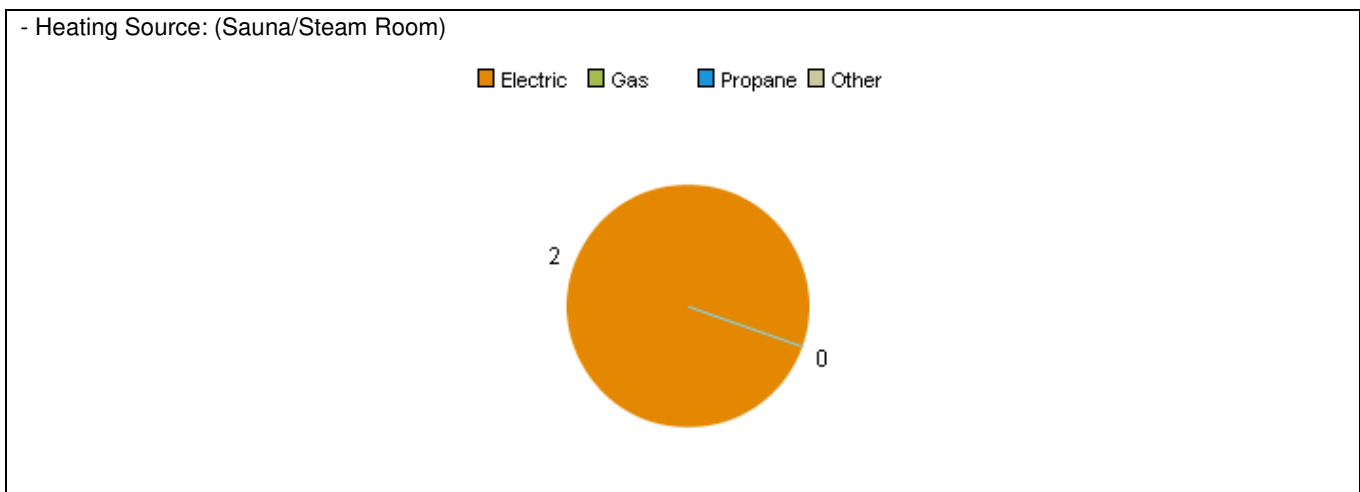
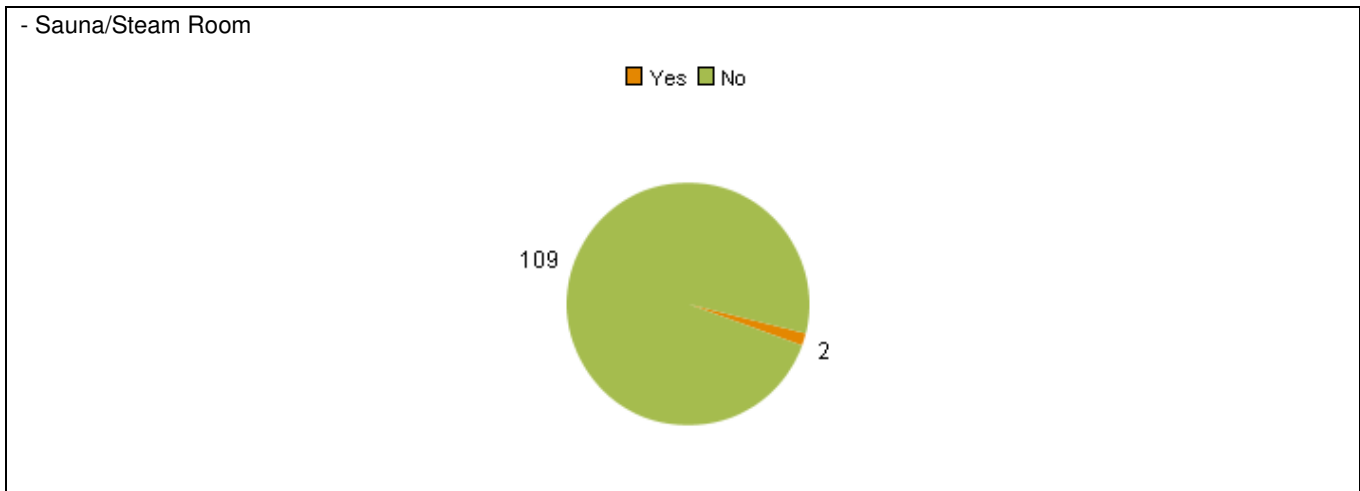
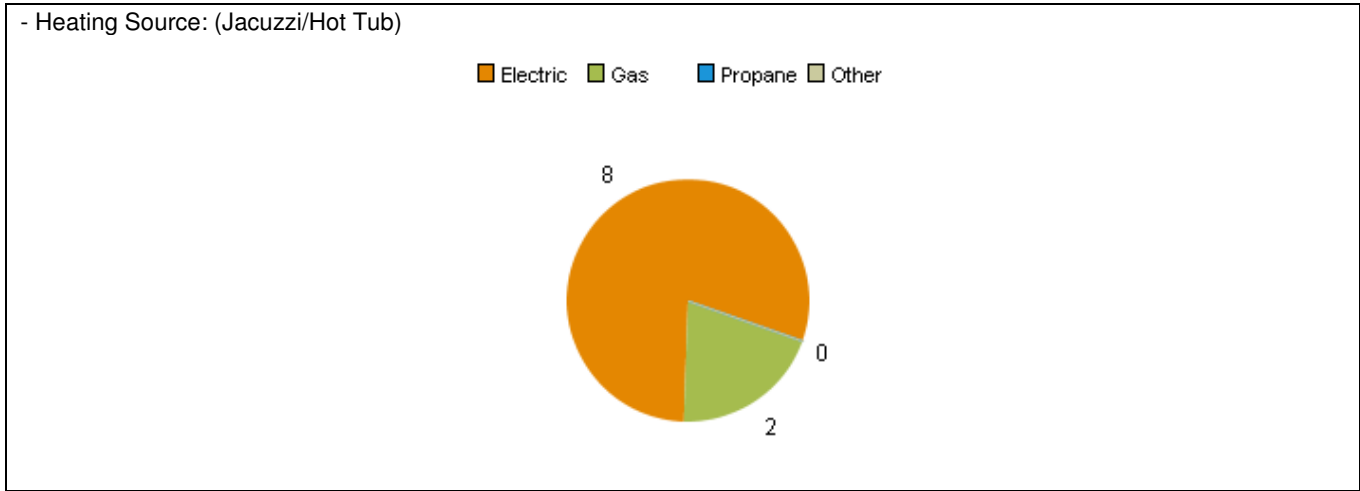
## Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

22.) Do you have any of the following: - (Continued)



## Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

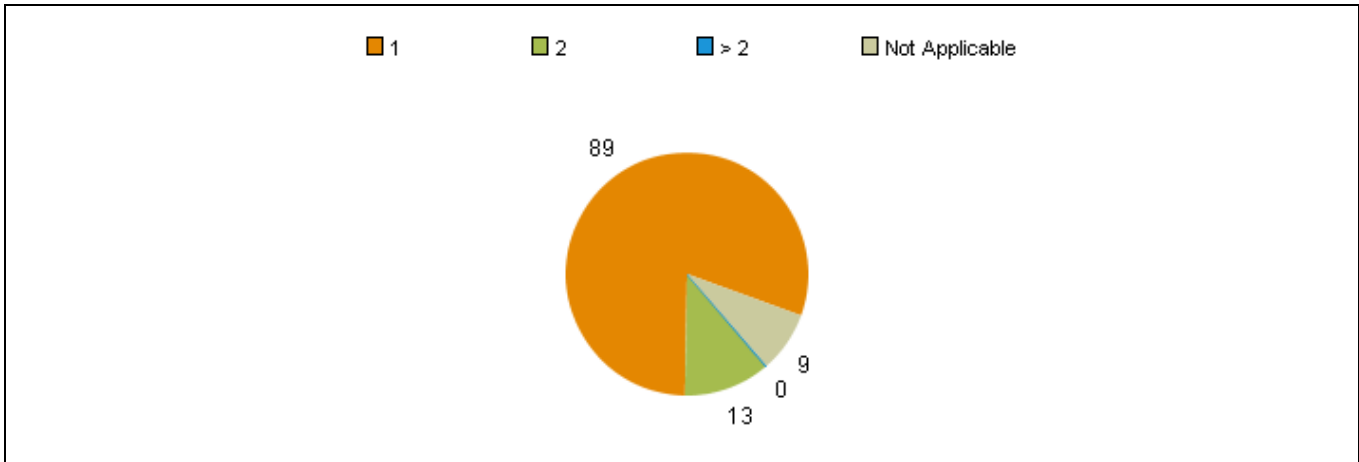
22.) Do you have any of the following: - (Continued)



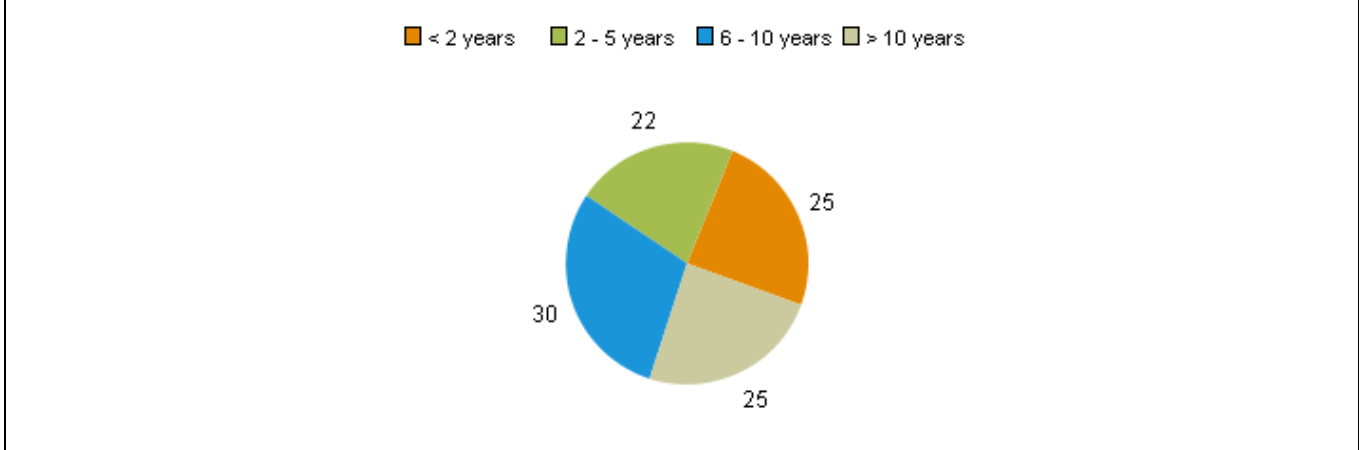


## Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

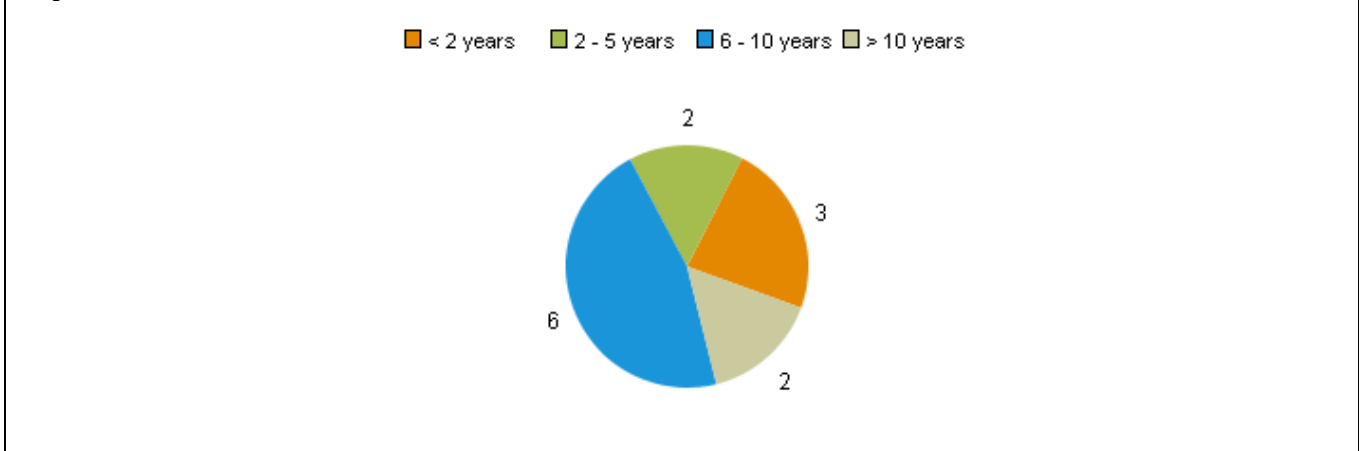
23.) How many permanent A/C units do you have?



- Age of A/C unit No. 1.

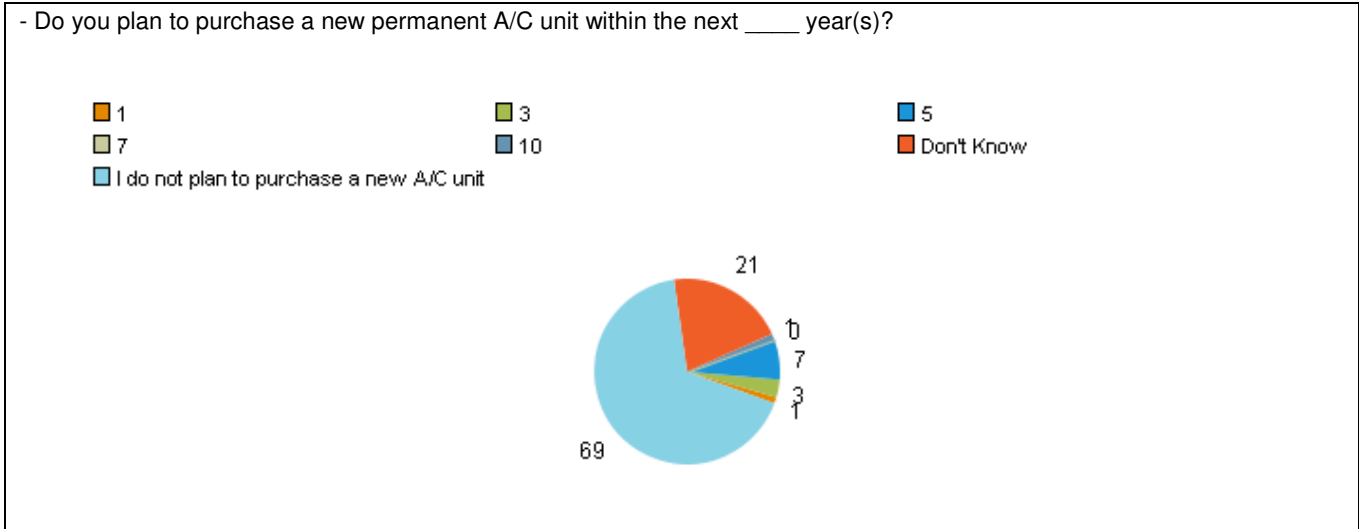


- Age of A/C unit No. 2.

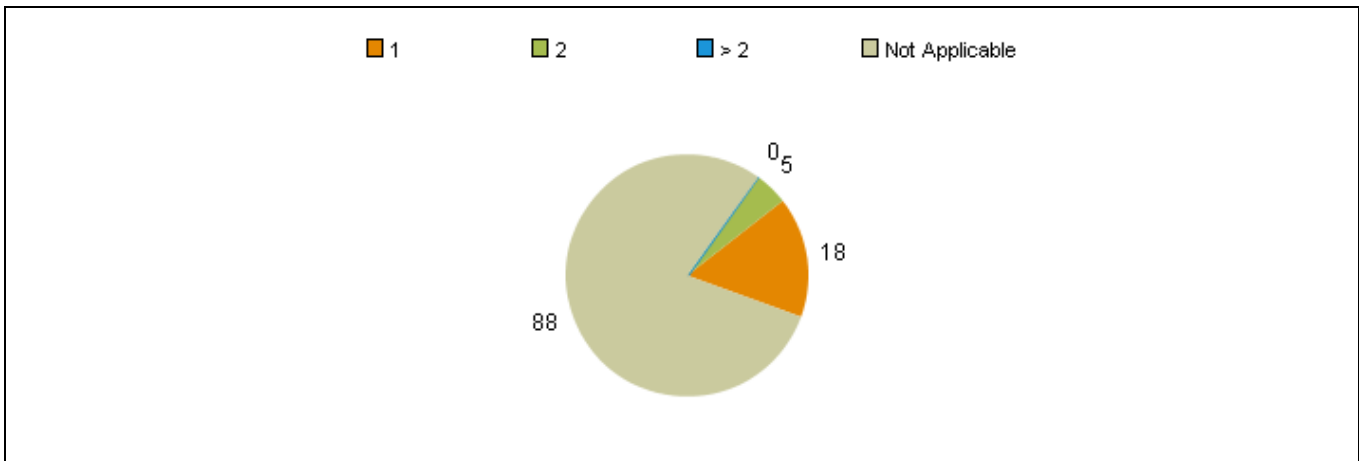


## Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

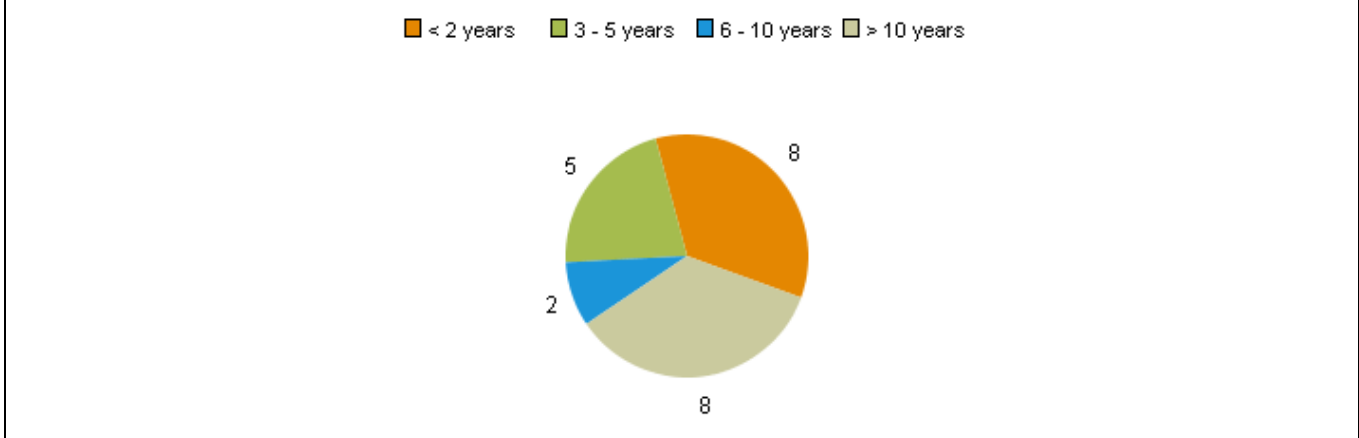
23.) How many permanent A/C units do you have? – (Continued)



24.) How many heat pumps do you have?

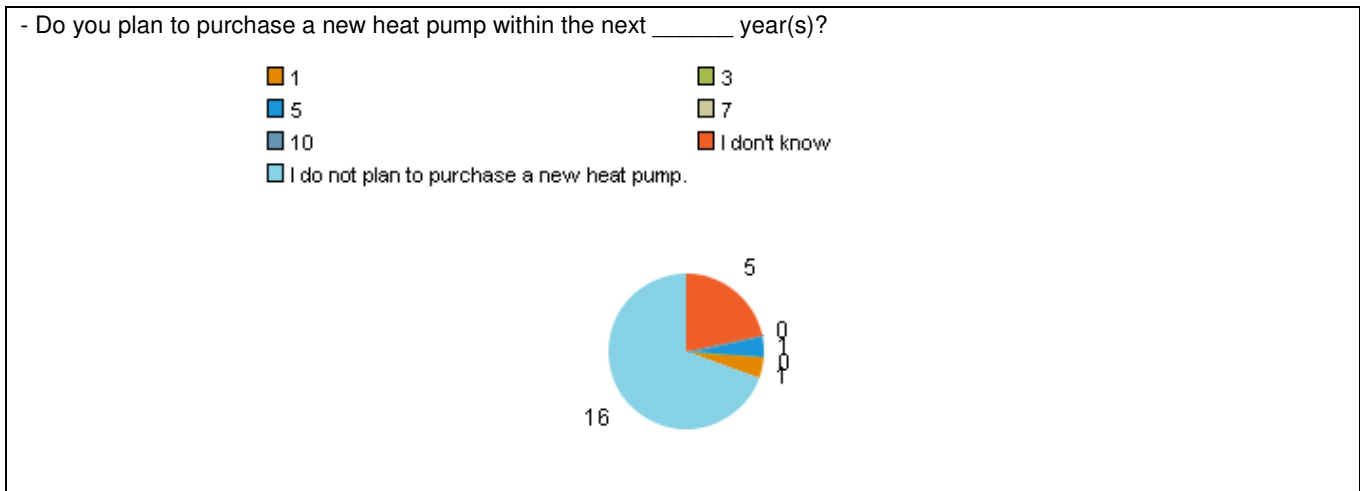
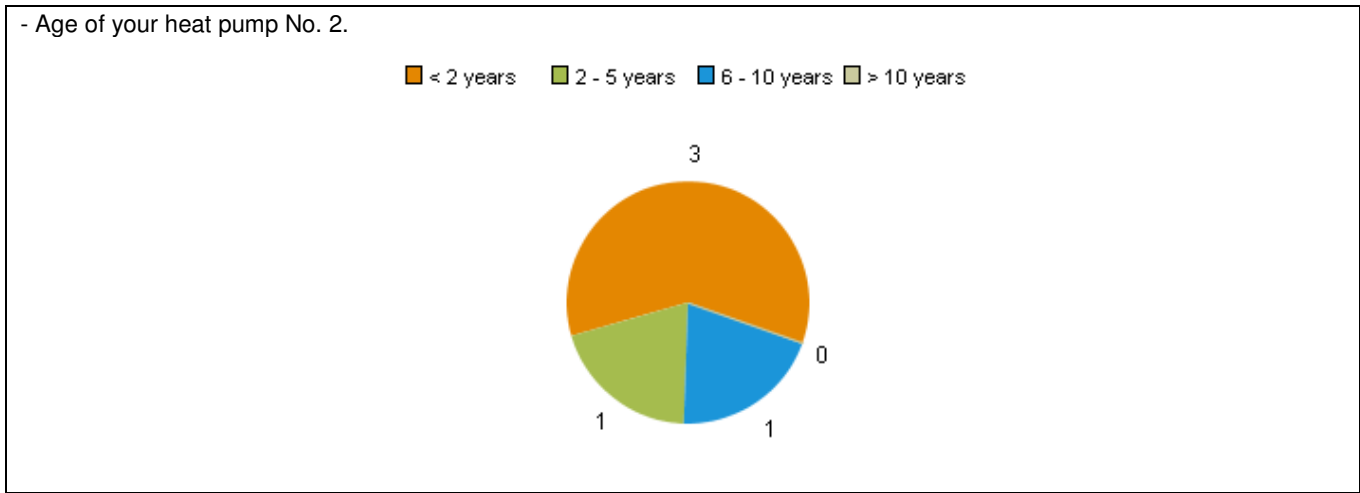


- Age of your heat pump No. 1.



## Smart Sense Demographic Survey - Time-of-Day Customers – (Continued)

25.) How many heat pumps do you have? – (Continued)

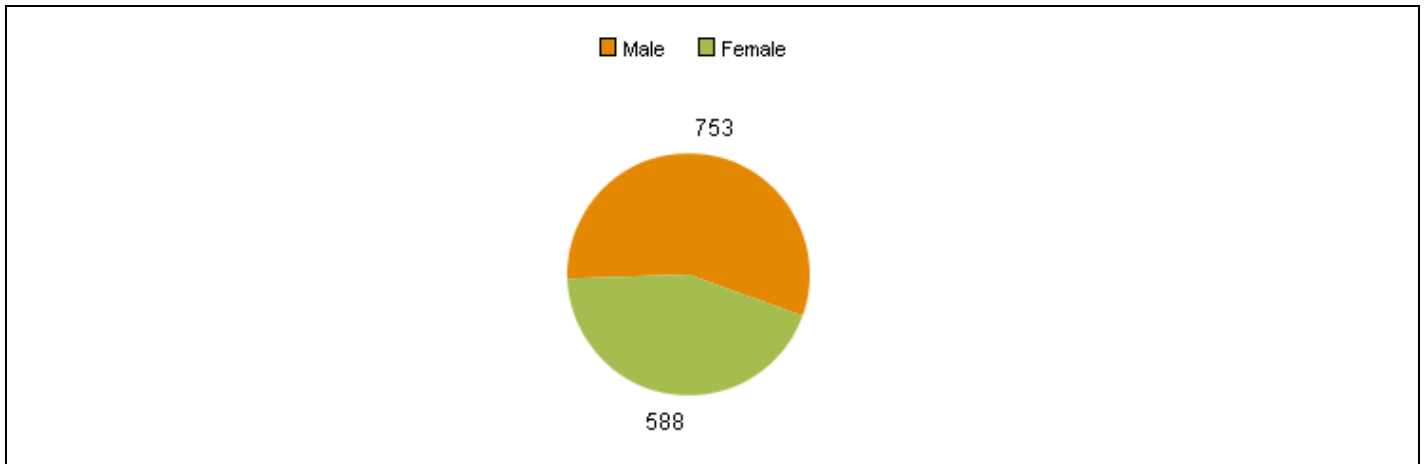


# **Attachment 10**

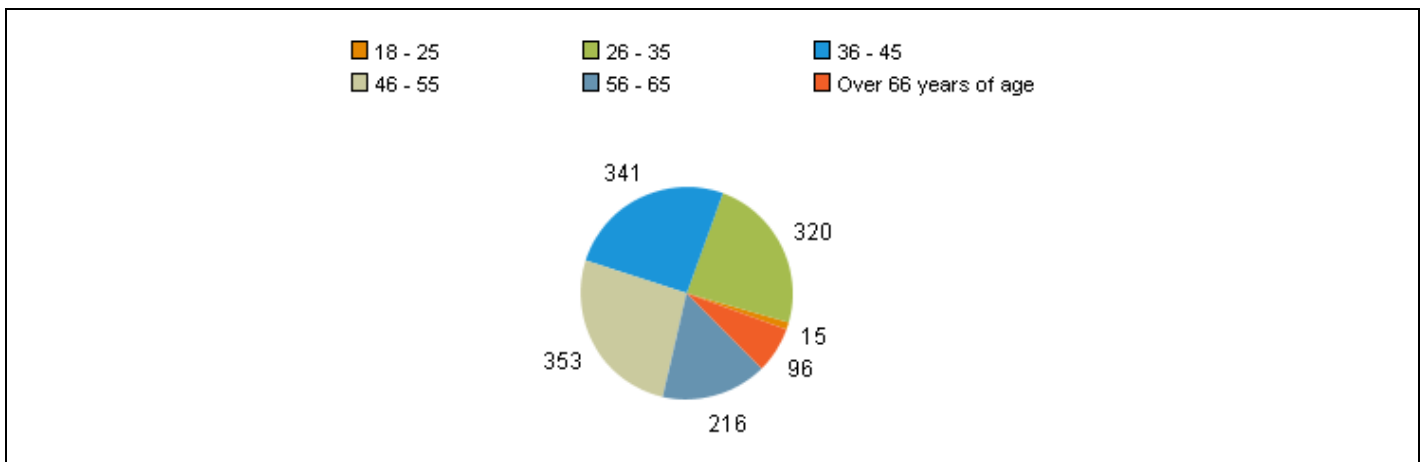
**Demographic Statistics – TOW Customers**

# Smart Sense Demographic Survey - Time-of-Week Customers

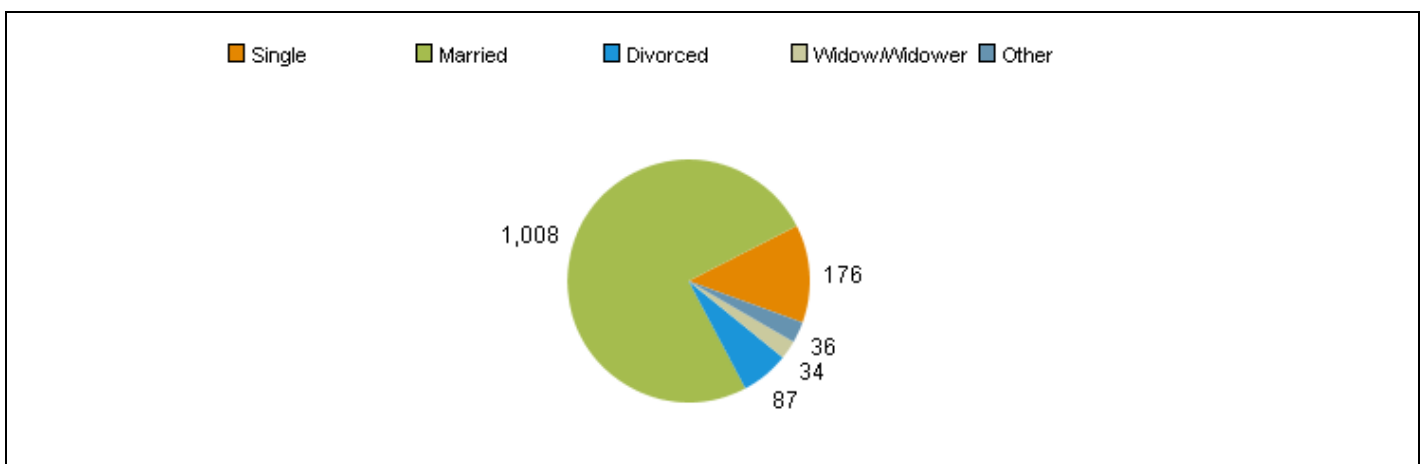
1.) What is your gender?



2.) What is your age?

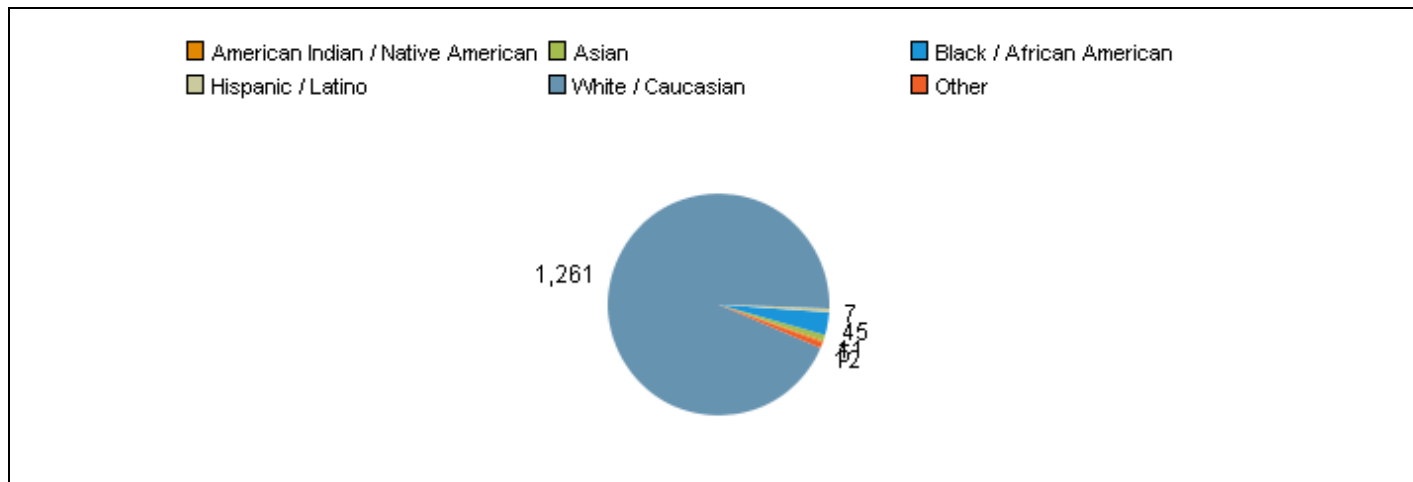


3.) What is your marital status?

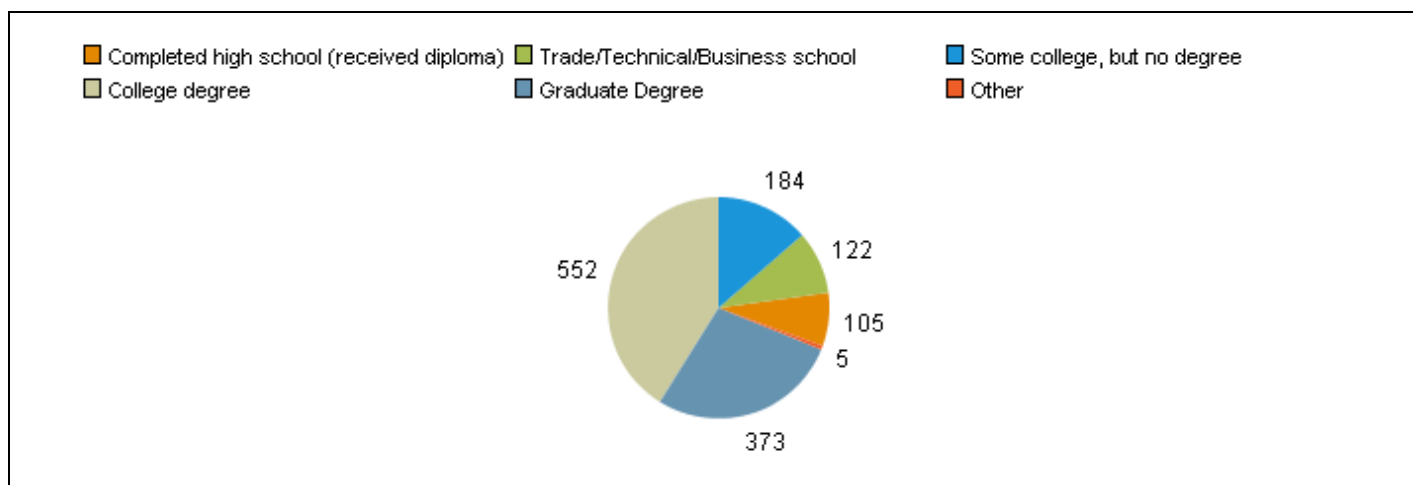


## Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

4.) How would you describe your race?

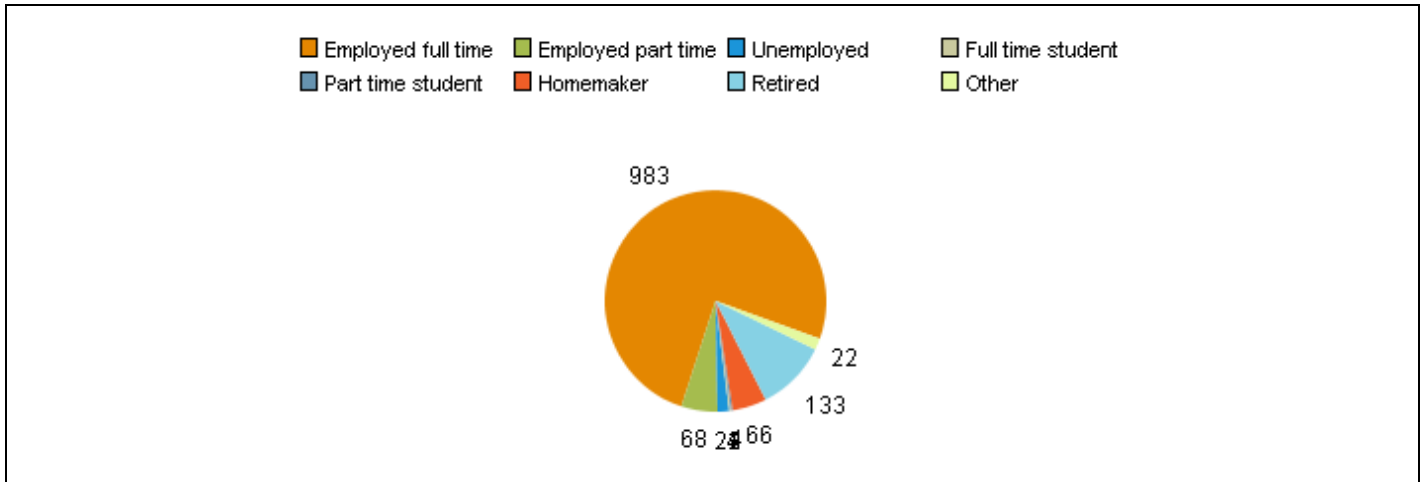


5.) What is the highest level of education that you've completed?

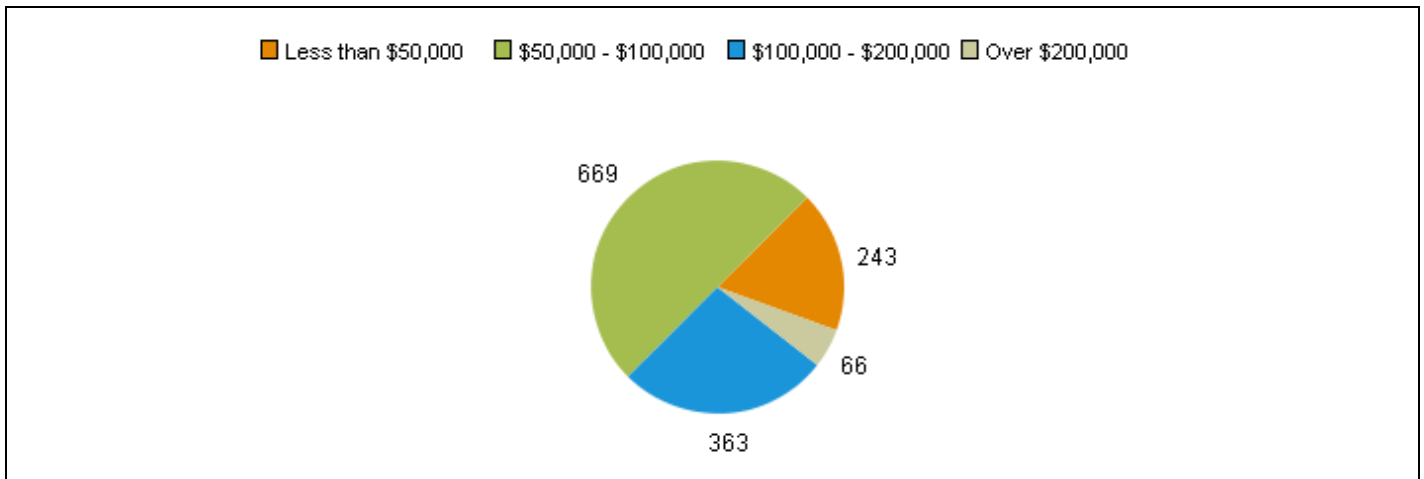


## Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

6.) How would you describe your current employment status? (Please check all that may apply.)

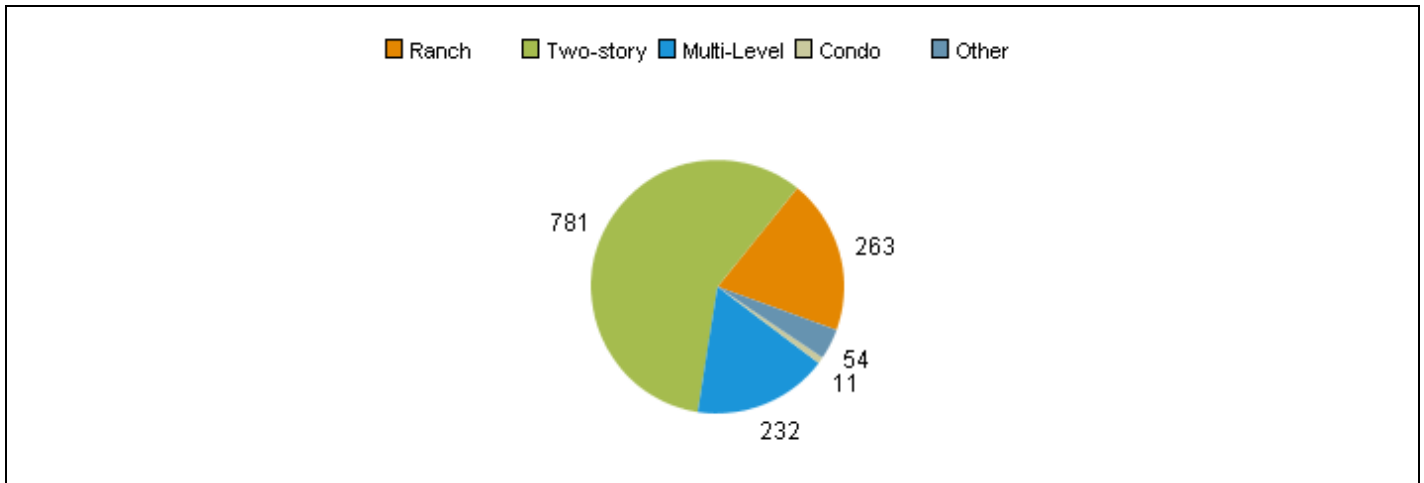


7.) What was your household's annual income for 2010?

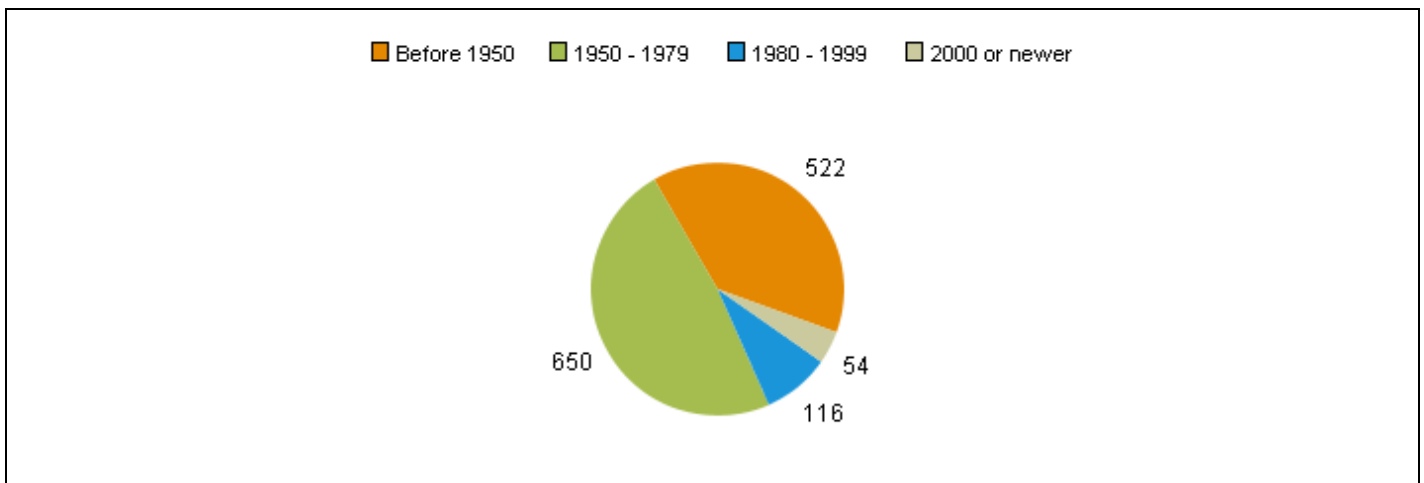


## Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

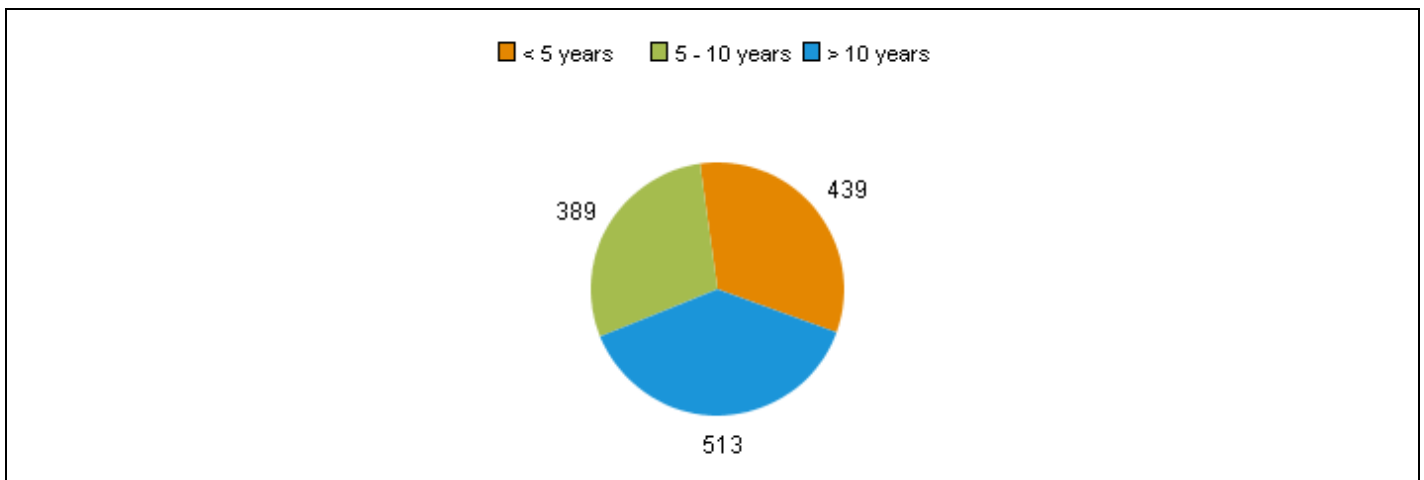
8.) Do you live in a:



9.) What year was your home built?



10.) How long have you lived at this residence?



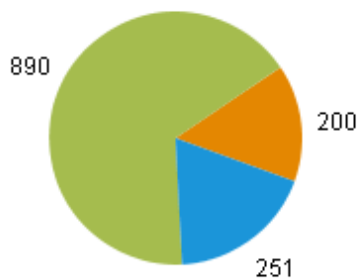


## Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

11.) Including you, how many people live in your home? (Please select an answer from each drop down list below.)

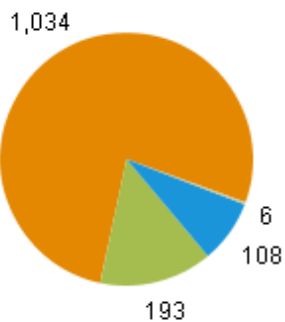
- Number of Adults (18 years of age and older):

1 2 3 or more



- Number of Children (1 - 5 years of age)

0 1 2 3 or more

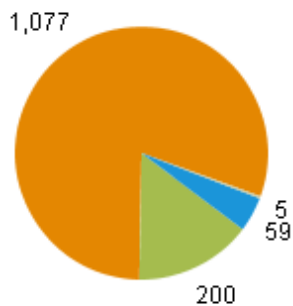


## Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

11.) Including you, how many people live in your home? (Please select an answer from each drop down list below.) – (Continued)

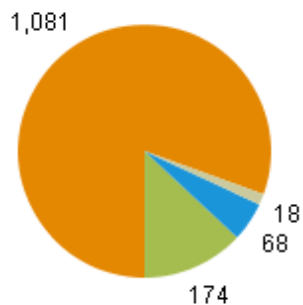
- Number of Children (6 - 10 years of age)

0 1 2 3 or more



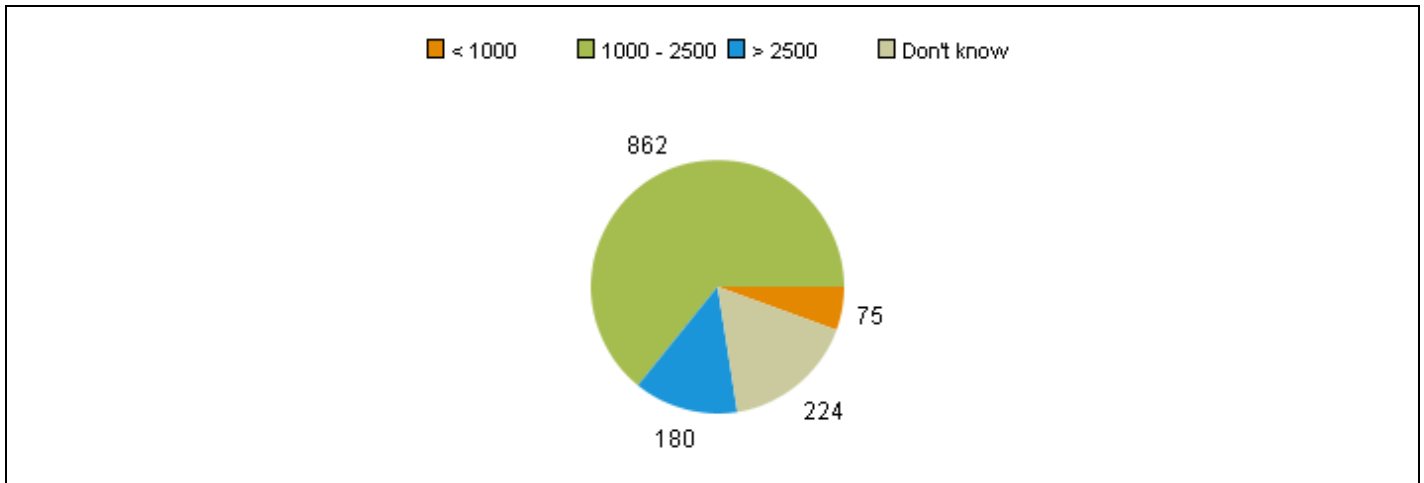
- Number of Children (11 - 17 years of age):

0 1 2 3 or more

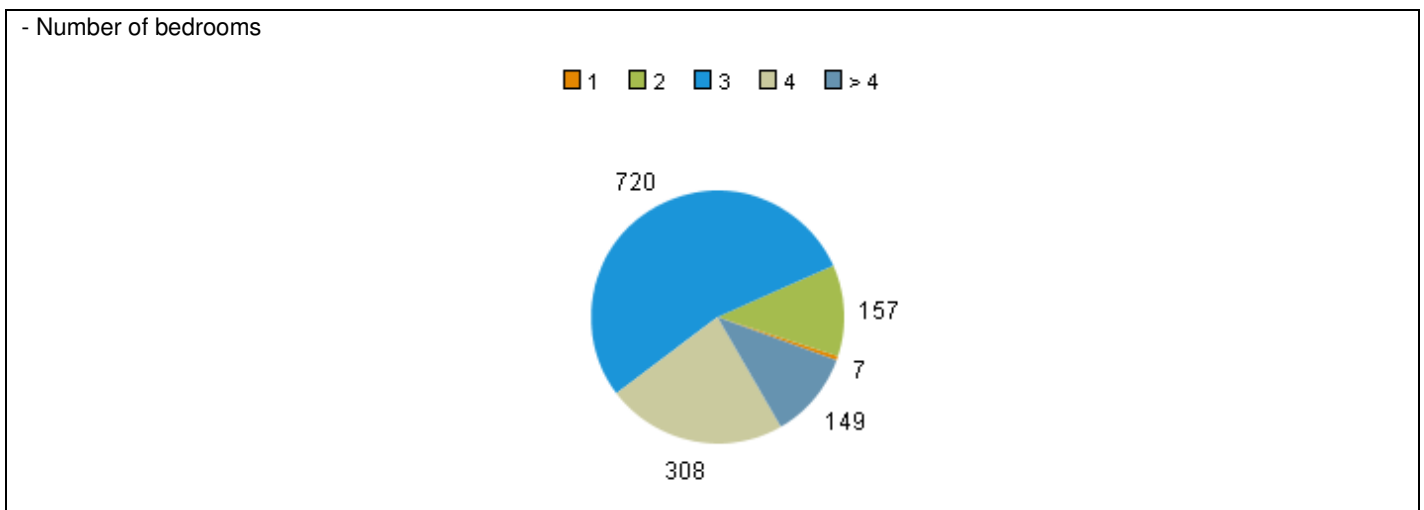


## Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

12.) What is your home's square footage of living space?

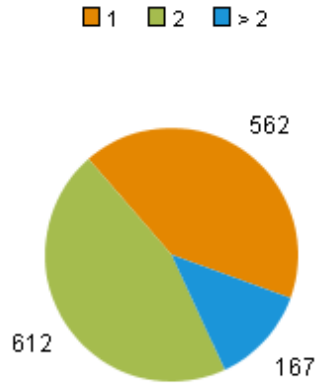


13.) How many rooms does your home have? Please count living areas and bath rooms, but skip closets and hallways. (Please select an answer from each drop down list below.)

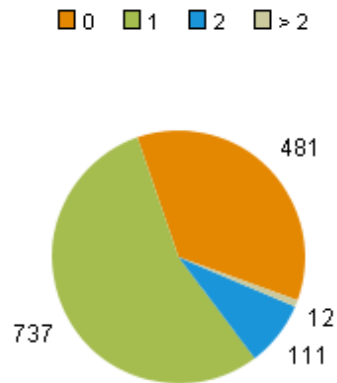


# Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

- Number of full bathrooms

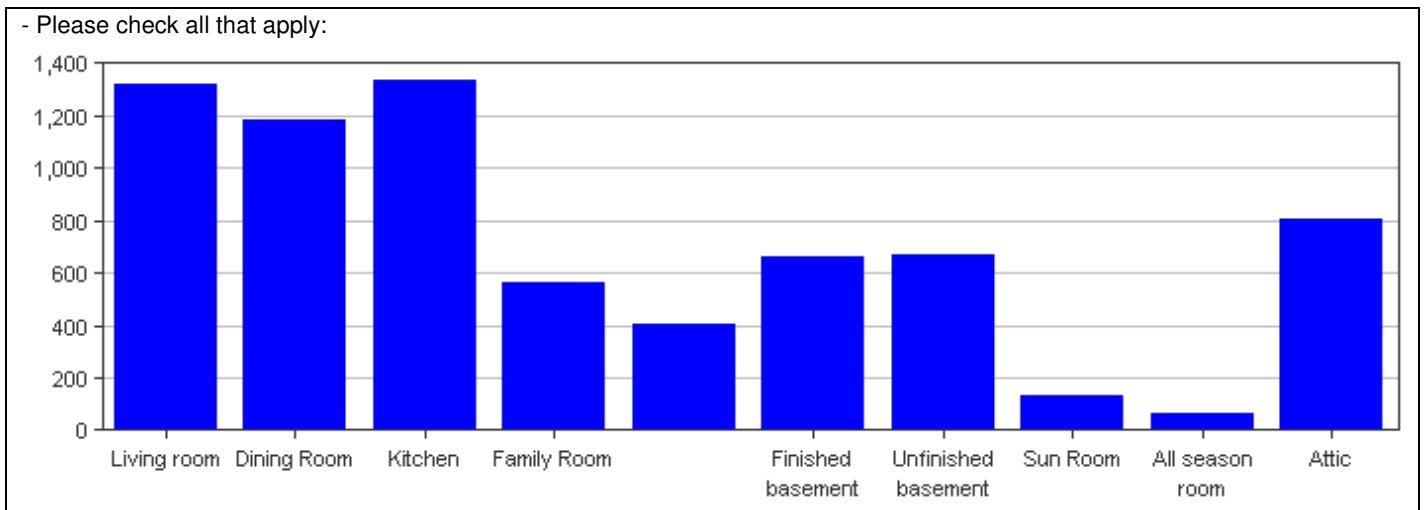
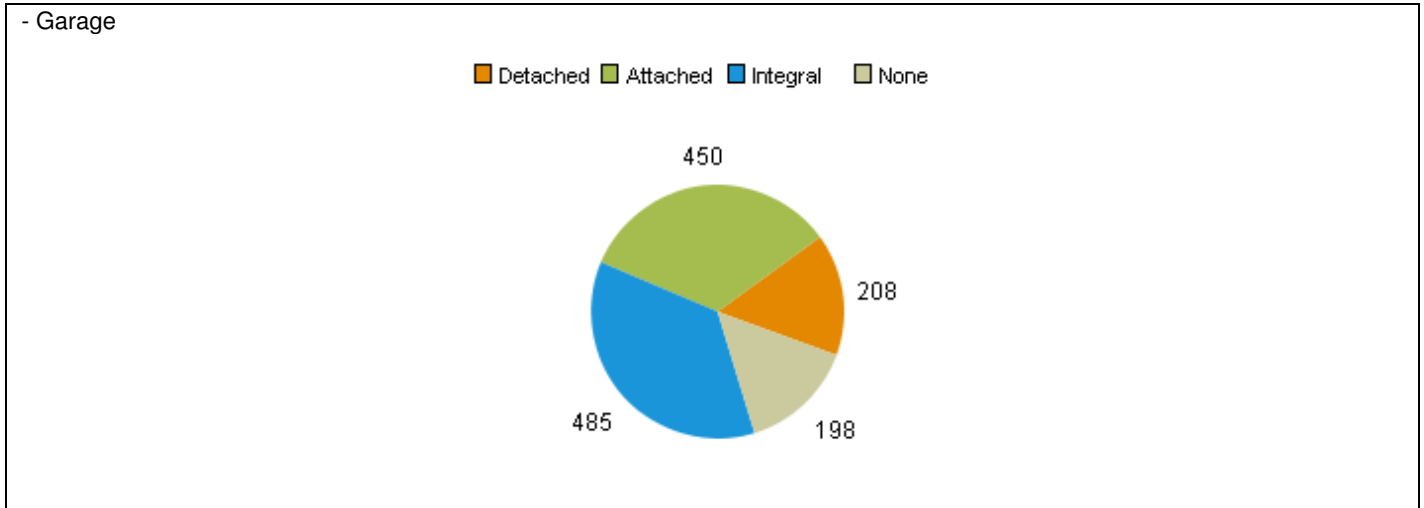


- Number of partial bathrooms



## Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

13.) How many rooms does your home have? Please count living areas and bath rooms, but skip closets and hallways. (Please select an answer from each drop down list below.) – (Continued)

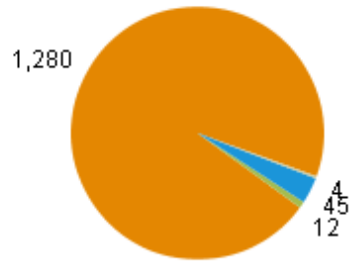


## Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

14.) Do you use any of the following equipment on a daily basis:

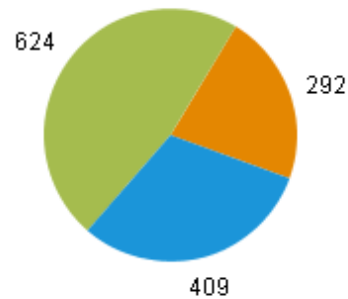
- Computer

Yes No Occasionally Never



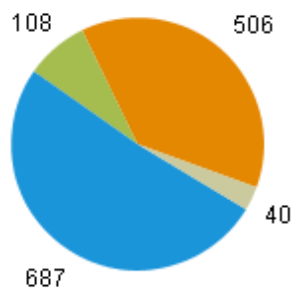
- When not in use, is your computer:

Always on In sleep mode Shut down/turned off



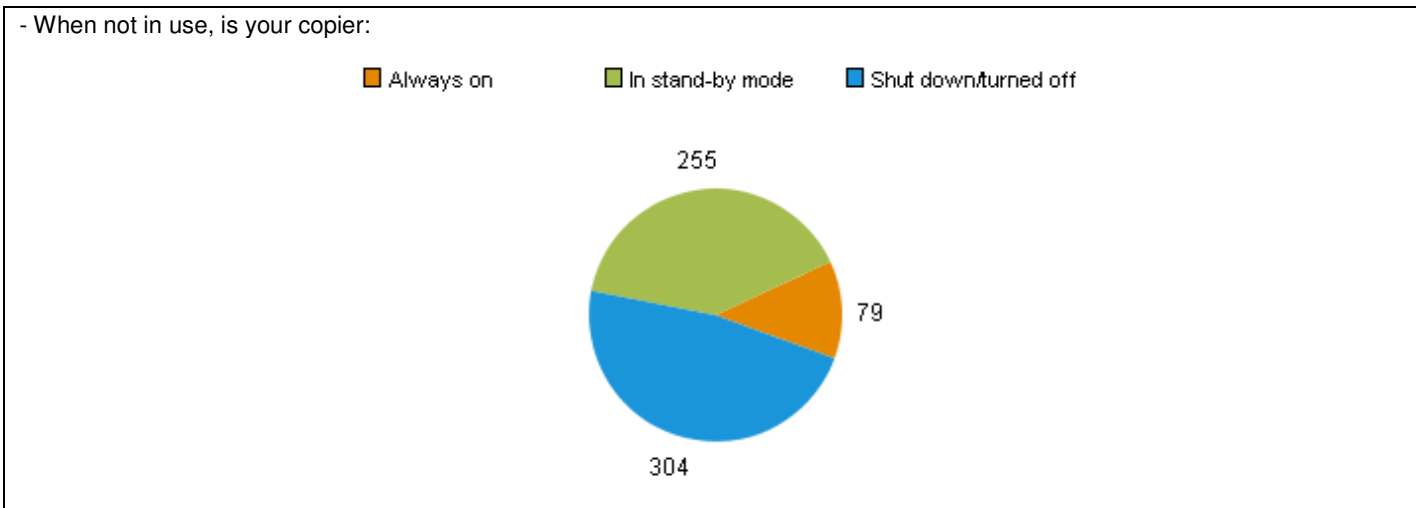
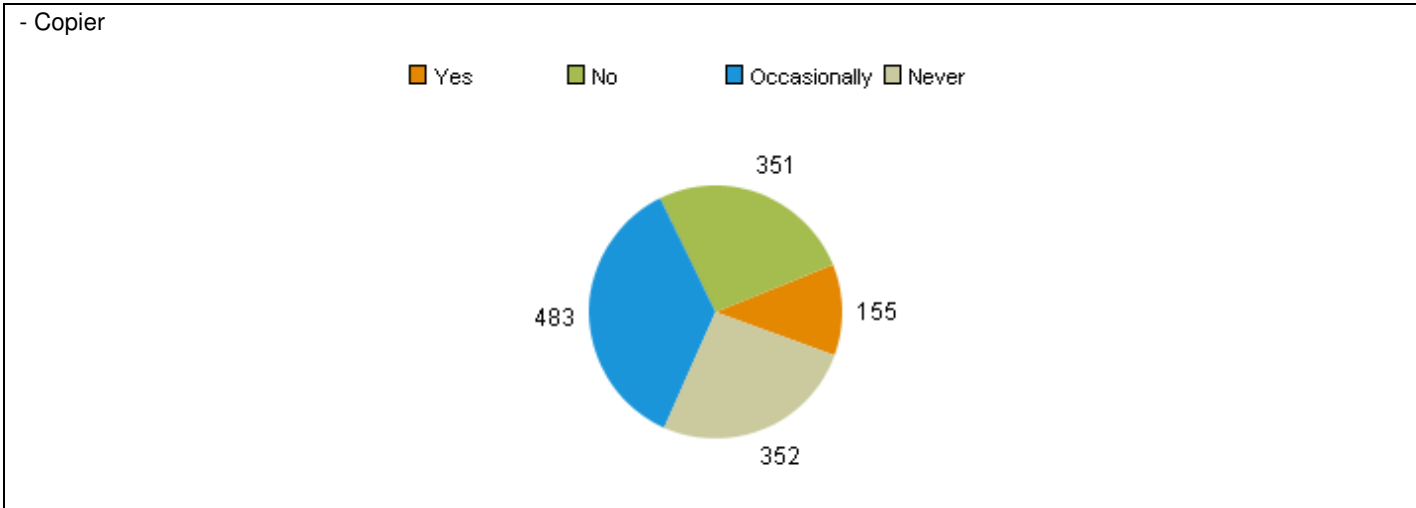
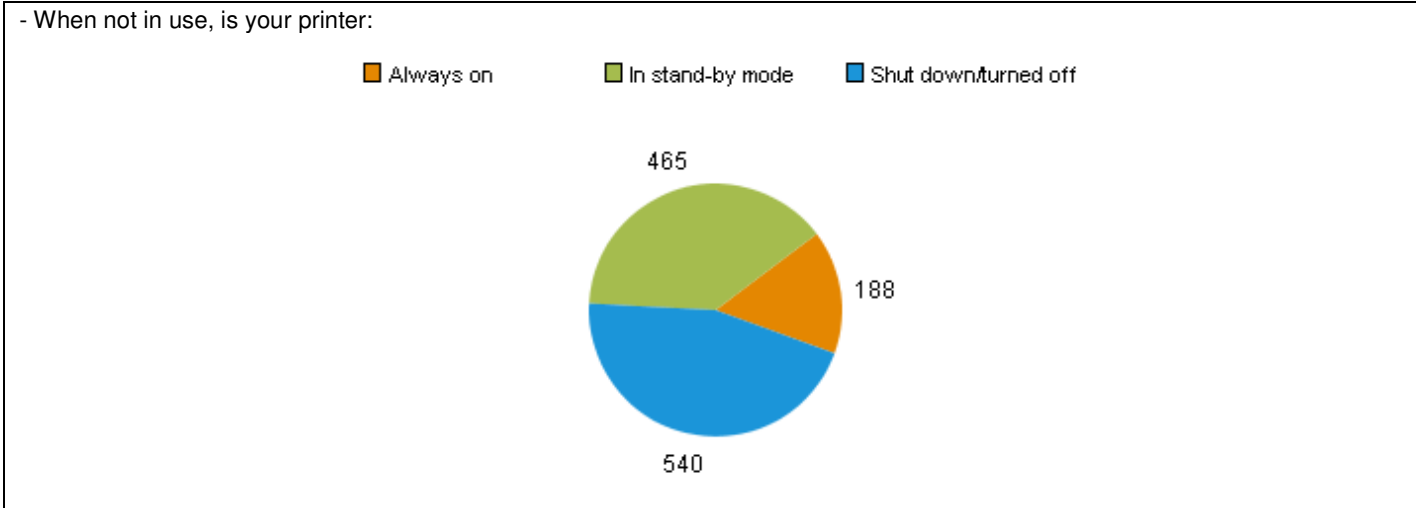
- Printer

Yes No Occasionally Never



# Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

14.) Do you use any of the following equipment on a daily basis: - (Continued)

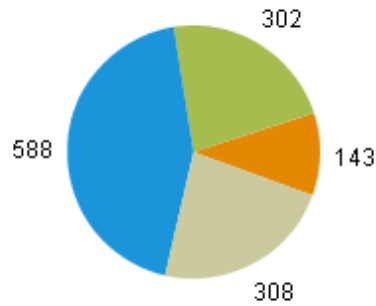


## Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

14.) Do you use any of the following equipment on a daily basis: - (Continued)

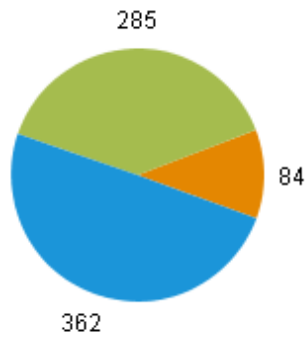
- Scanner

■ Yes    
 ■ No    
 ■ Occasionally    
 ■ Never



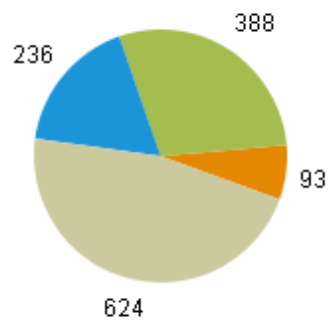
- When not in use, is your scanner:

■ Always on    
 ■ In stand-by mode    
 ■ Shut down/turned off



- Facsimile Machine

■ Yes    
 ■ No    
 ■ Occasionally    
 ■ Never



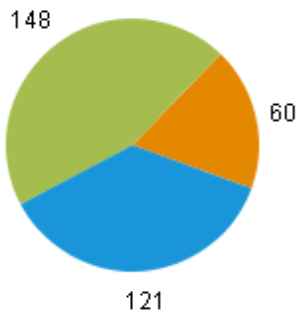


## Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

14.) Do you use any of the following equipment on a daily basis: - (Continued)

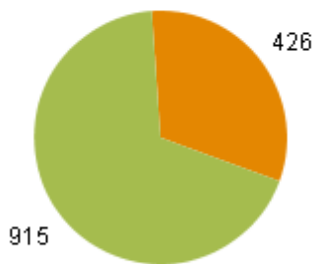
- When not in use, is your facsimile:

Always on      In stand-by mode      Shut down/turned off



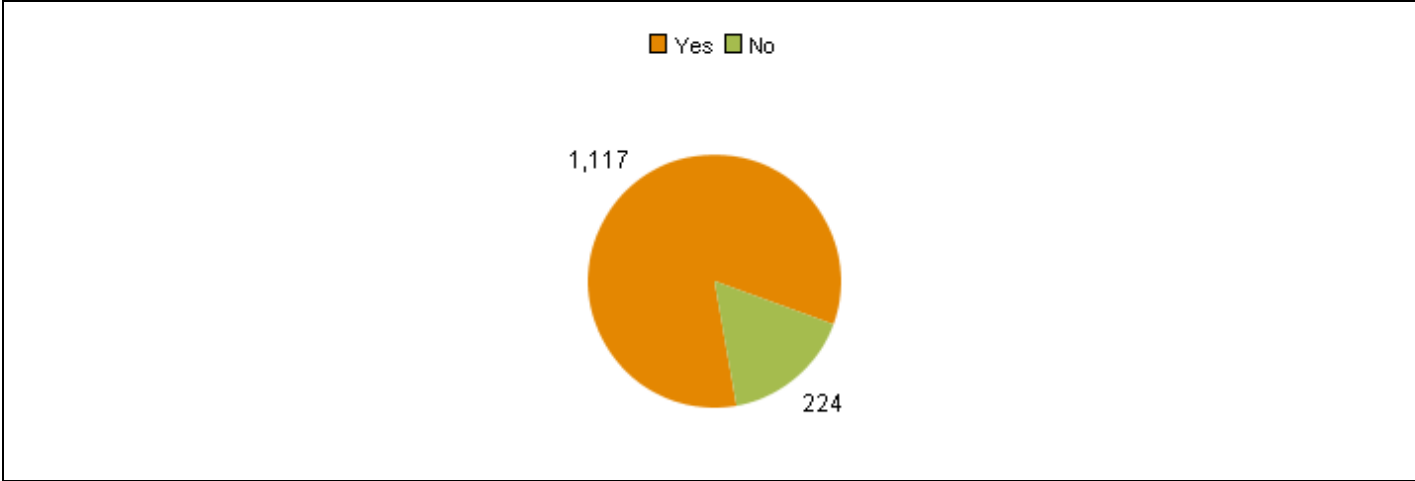
15.) Do you have an attic fan?

Yes      No

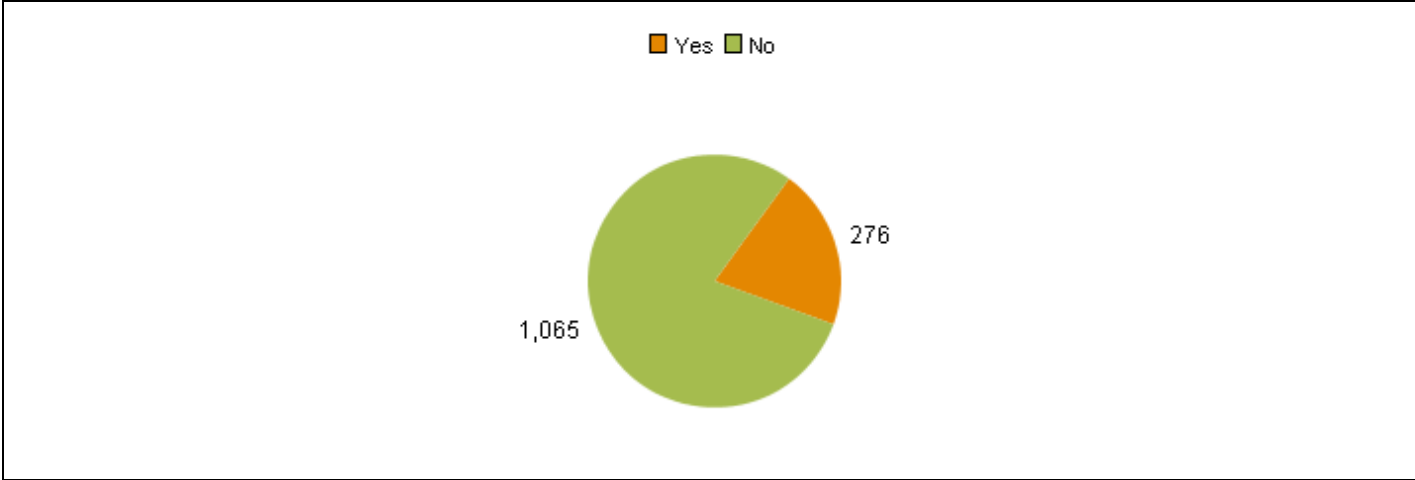


# Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

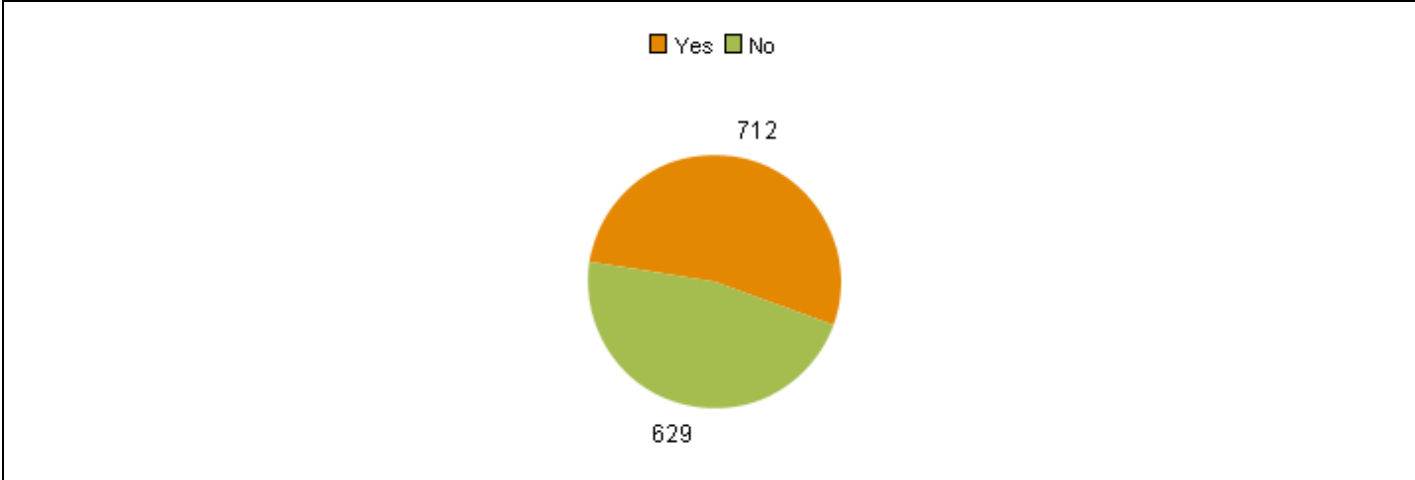
16.) Are there ceiling fans installed in your home?



17.) Do you have an electric hot water heater?

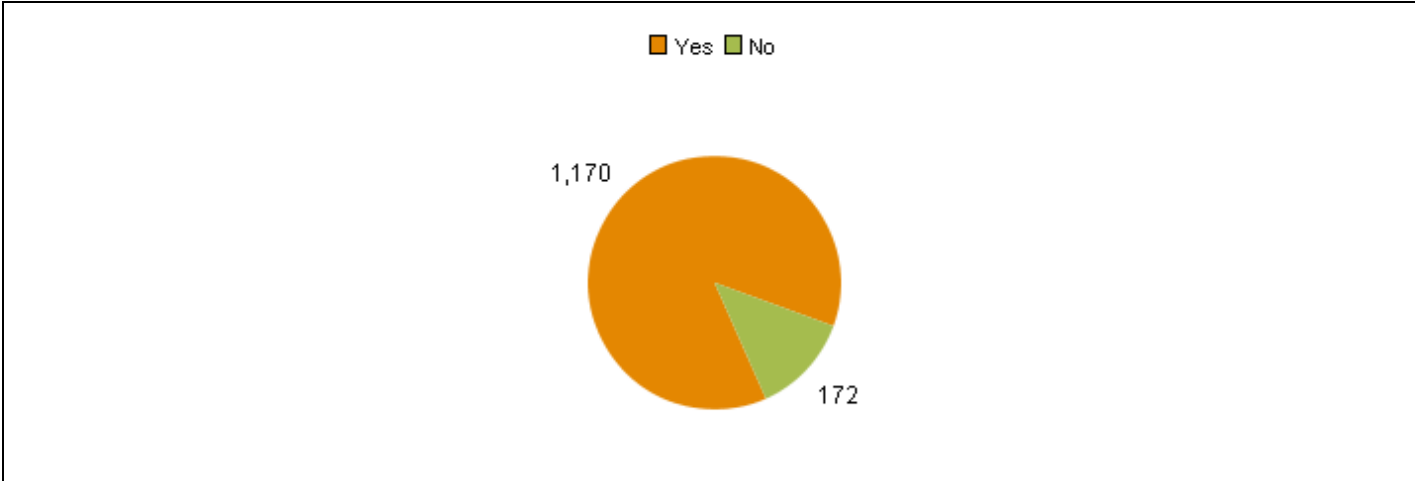


18.) Do you have an electric clothes dryer?

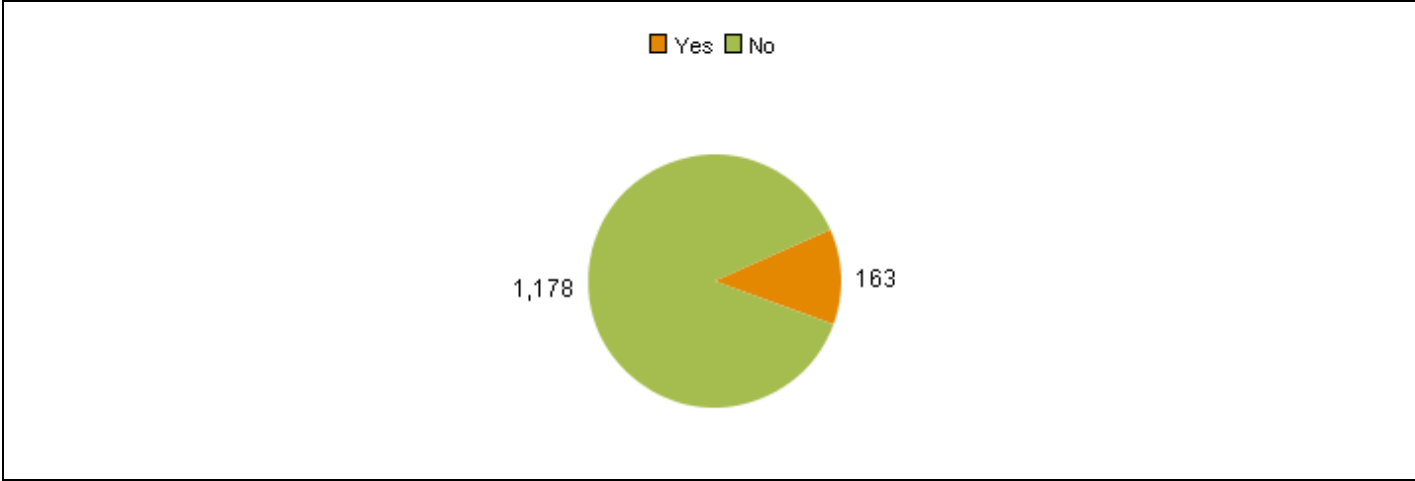


# Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

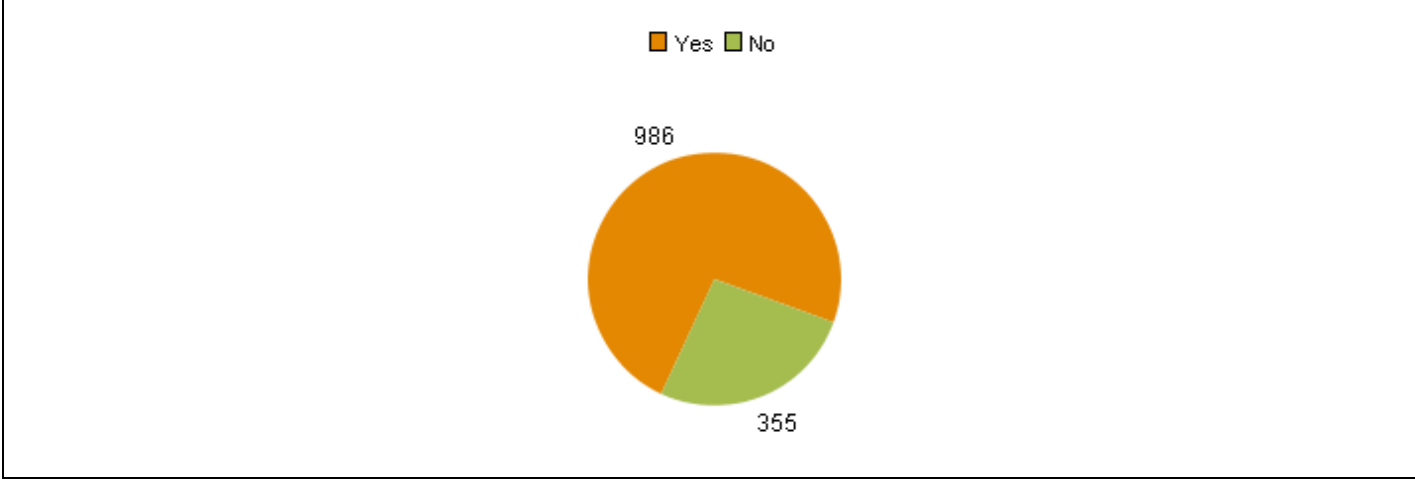
19.) Do you have a dishwasher?



20.) Do you have any window A/C units?

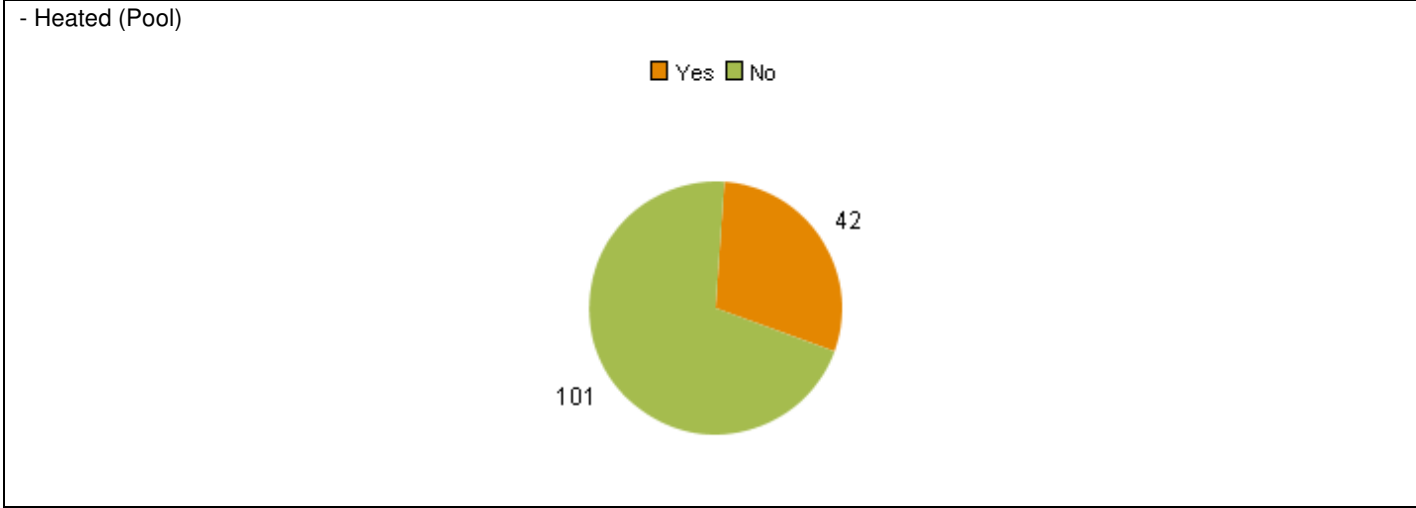
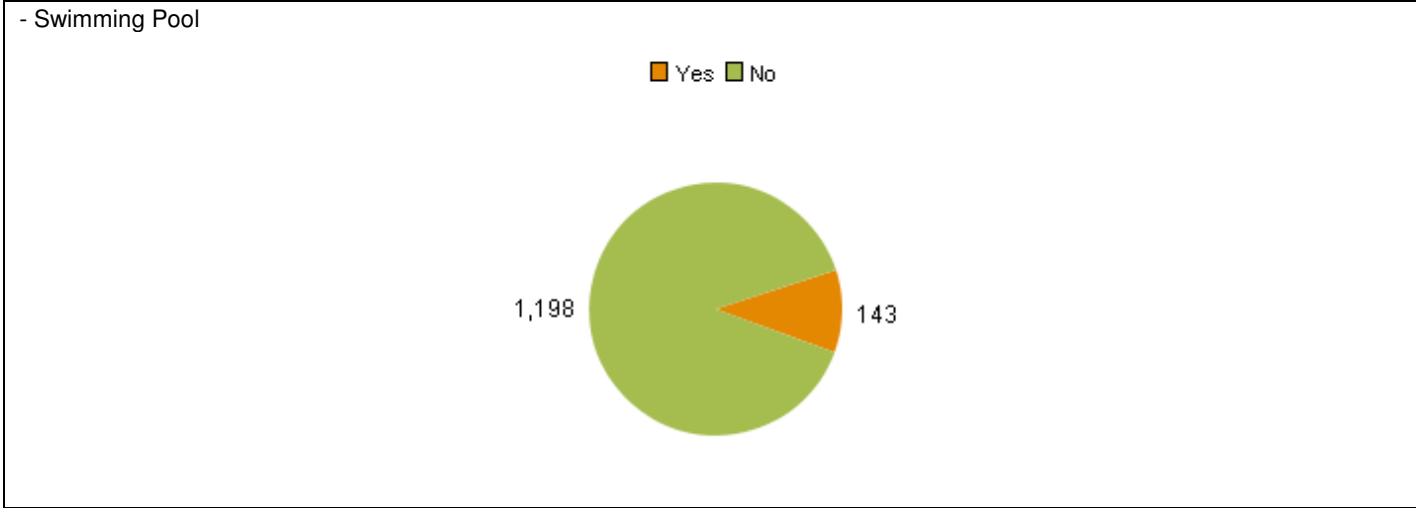


21.) Is there a programmable thermostat installed at your home?



# Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

22.) Do you have any of the following:

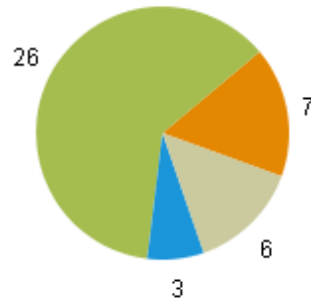


## Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

22.) Do you have any of the following: - (Continued)

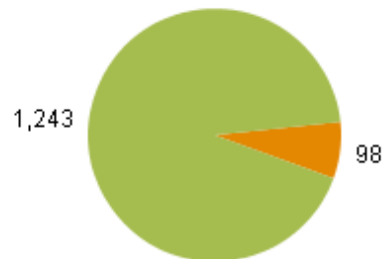
- Heating Source: (Pool)

Electric Gas Propane Other



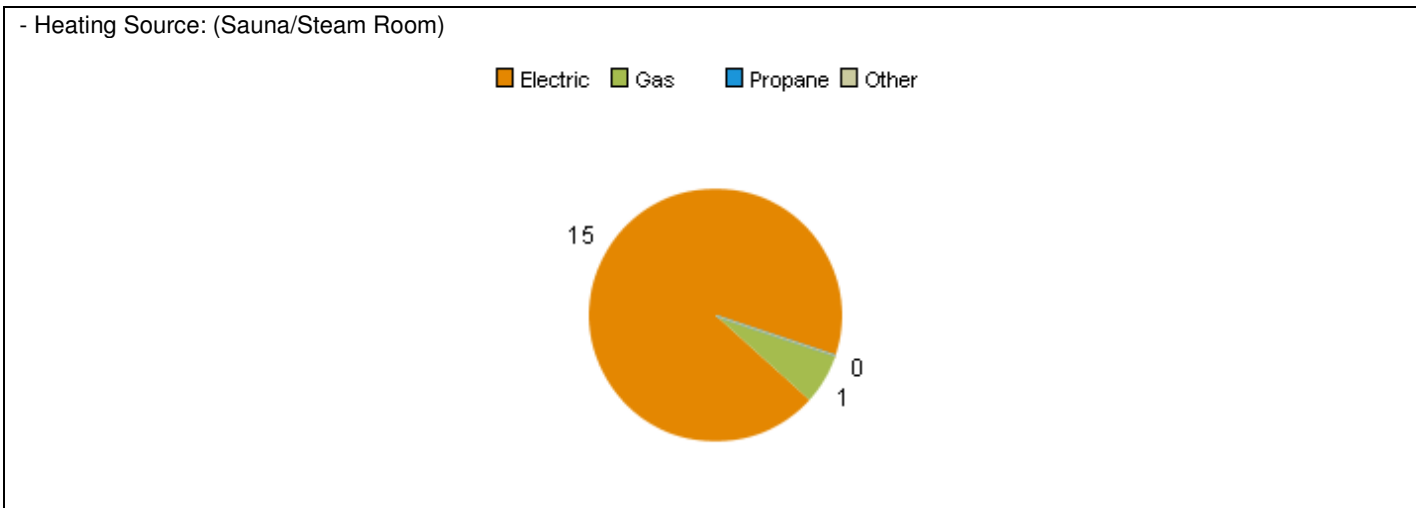
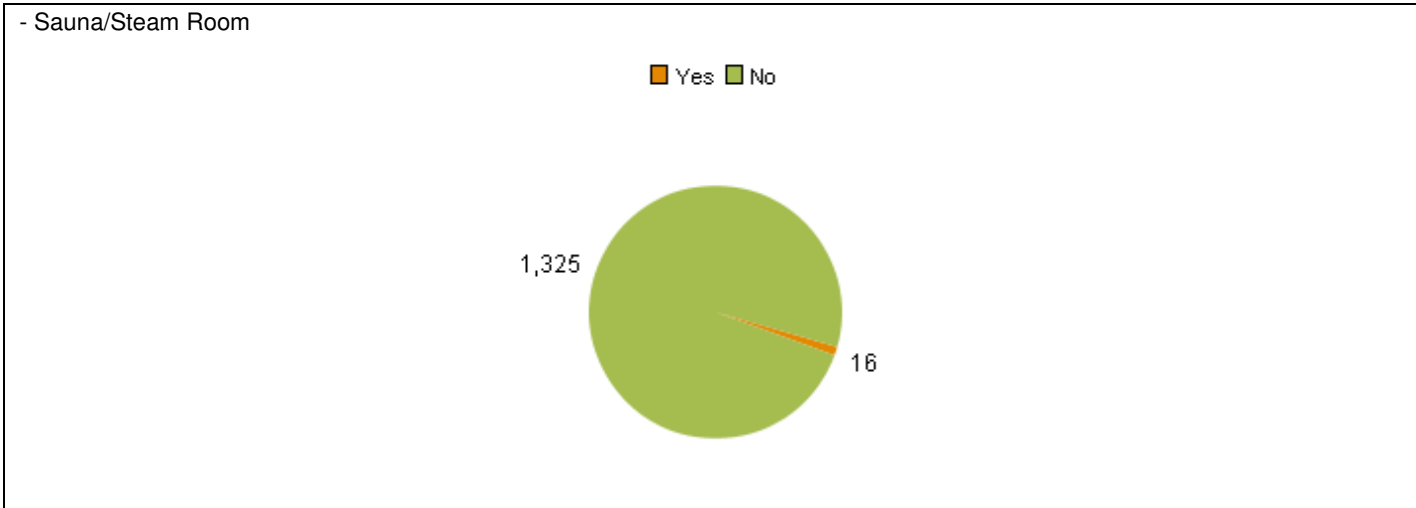
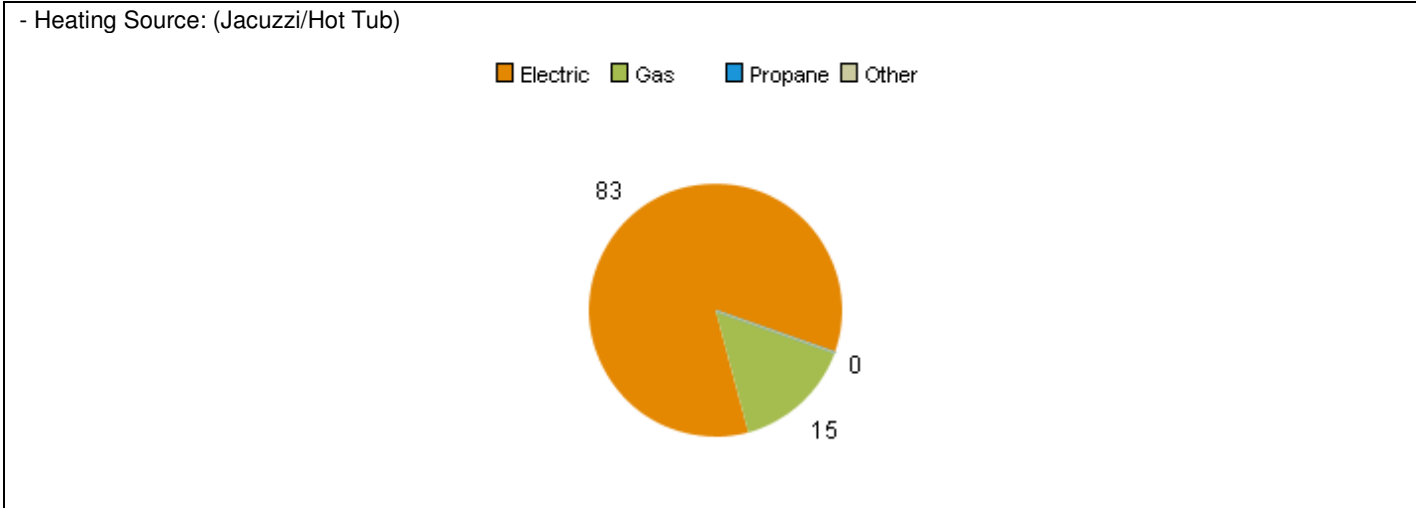
- Jacuzzi/Hot Tub

Yes No



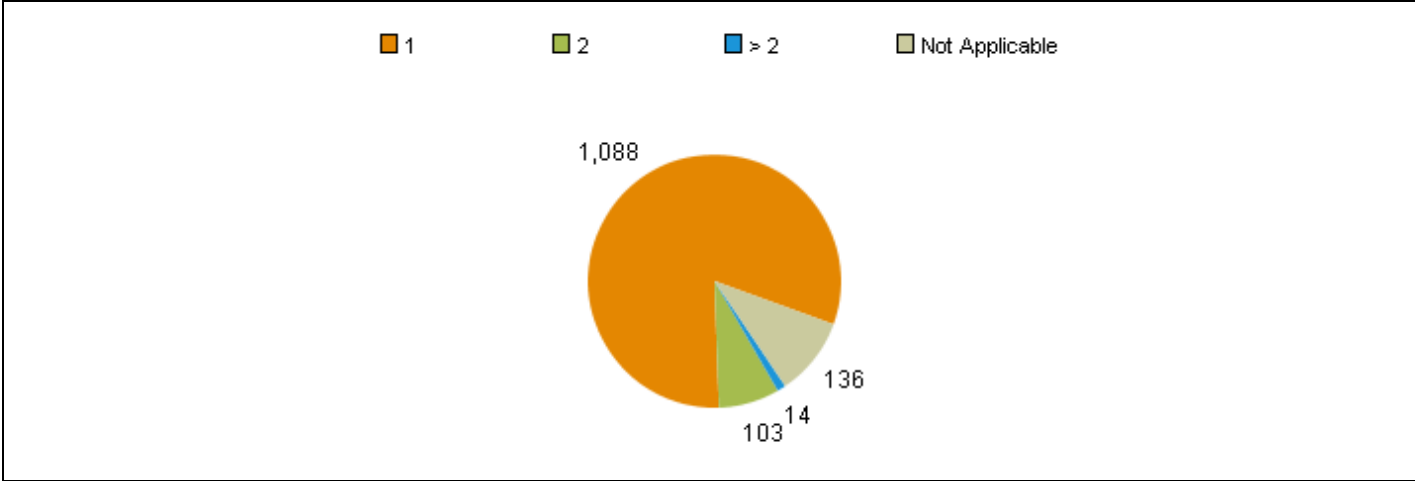
# Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

22.) Do you have any of the following: - (Continued)

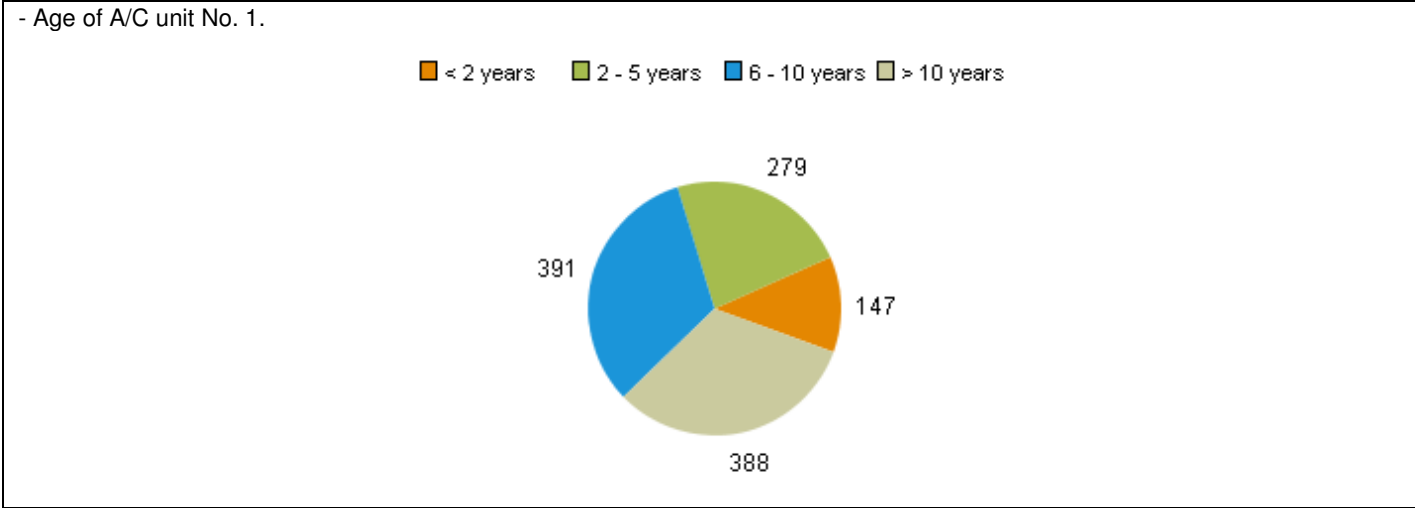


# Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

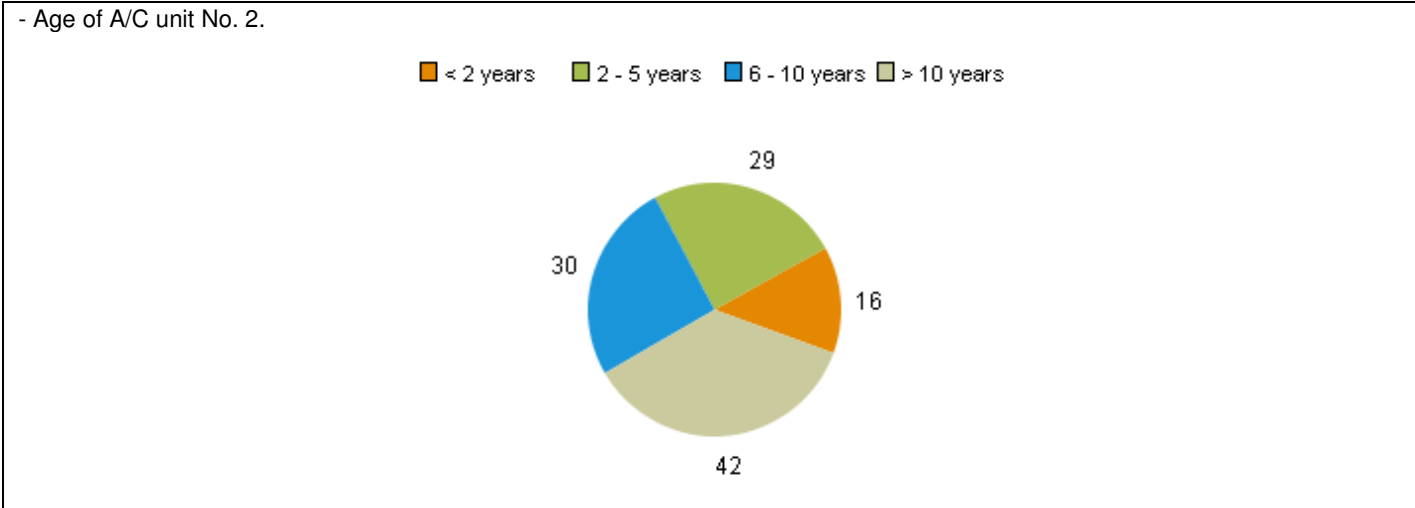
23.) How many permanent A/C units do you have?



- Age of A/C unit No. 1.



- Age of A/C unit No. 2.

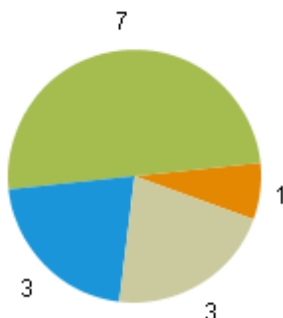


## Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

23.) How many permanent A/C units do you have? – (Continued)

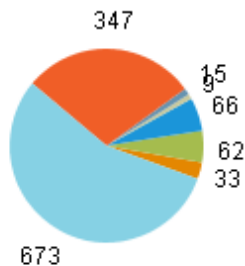
- Age of A/C unit No. 3.

■ < 2 years   
 ■ 2 - 5 years   
 ■ 6 - 10 years   
 ■ > 10 years



- Do you plan to purchase a new permanent A/C unit within the next \_\_\_\_ year(s)?

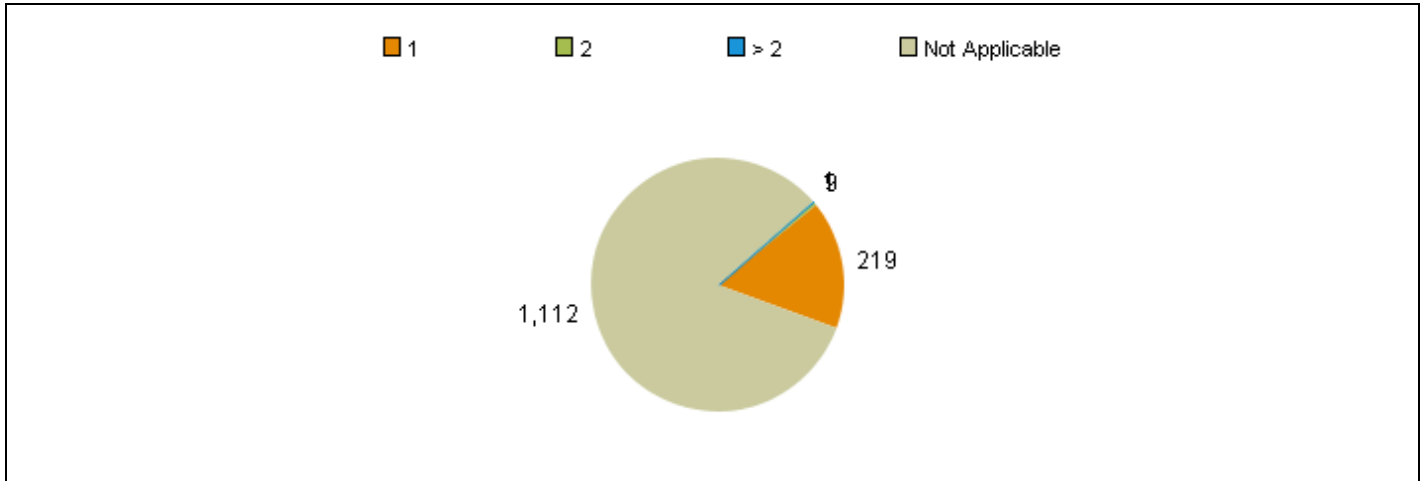
■ 1                                   
 ■ 3                                   
 ■ 5                                   
 ■ Don't Know  
■ 7                                   
 ■ 10  
■ I do not plan to purchase a new A/C unit



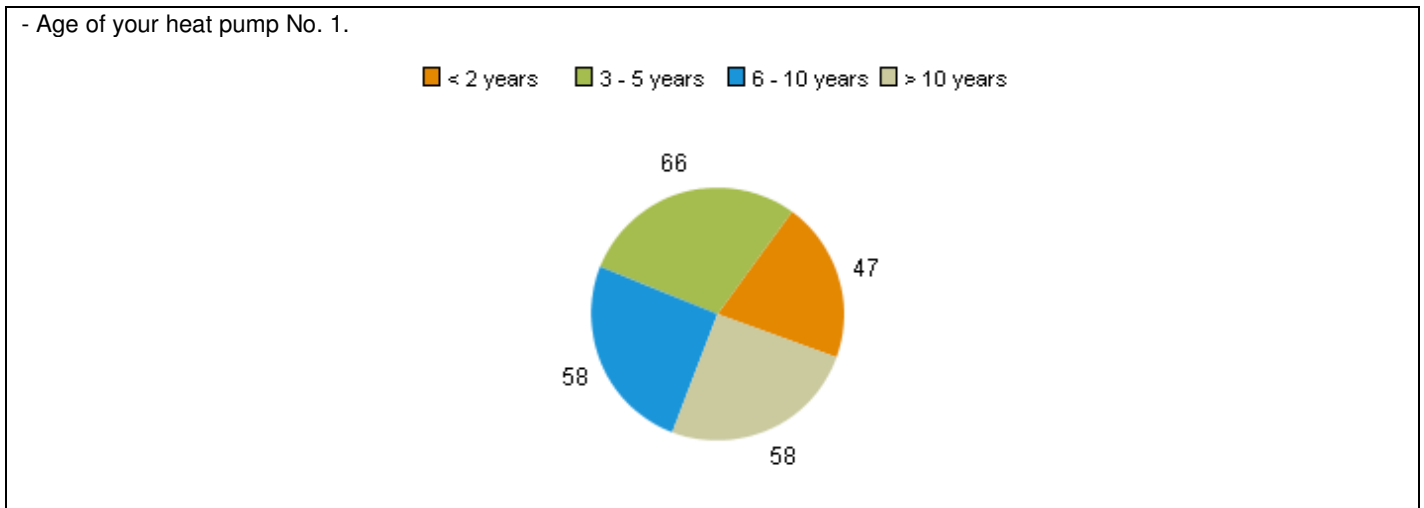


## Smart Sense Demographic Survey - Time-of-Week Customers – (Continued)

24.) How many heat pumps do you have?



- Age of your heat pump No. 1.





# **Attachment 11**

## **Customer Communications**

**E-Mail to TOD Customers  
Hourly Usage Button**

TOD Customer



*Dear Smart Sense Participant:*

**Thank you for being part of Duquesne Light's Smart Sense pilot program. We greatly appreciate your willingness to help us develop time-of-day rates – in conjunction with a smart-meter program – that will benefit all customers.**

We hope the installation of your pilot program meter went smoothly. We are collecting your hourly usage readings and have been working to be able to share that information with you. You're now able to track your usage patterns by signing onto the Smart Sense homepage and clicking on the "Hourly Usage Button." A link to daily usage information also is available there.

During this summer, we are collecting baseline usage information to be used for comparative purposes next summer when the program goes into full swing. These two links will help you better understand how you use electricity in your home and allow you to make effective changes in how you use electricity next summer.

Look for more emails in the near future that will help you begin to save energy and money through the Smart Sense program. We'll also be asking you to respond to an electronic survey that will help us finalize the design of next summer's Smart Sense pilot. Your participation in this survey is critical to the success of the pilot.

Thanks again for joining the Smart Sense program. We look forward to continue working with you on this important initiative.

**Smart Sense**  
SAVE ENERGY. SMART!

---

Duquesne Light Smart Sense Team  
smartsense@duqlight.com  
www.duquesnelight.com/smartsense

**E-Mail to TOD Customers  
Daily Usage Button**

TOW Customer



*Dear Smart Sense Participant:*

**Thank you for being part of Duquesne Light's Smart Sense pilot program. We greatly appreciate your willingness to help us develop time-of-day rates – in conjunction with a smart-meter program – that will benefit all customers.**

During this summer, we are collecting your baseline usage information to be used for comparative purposes next summer when the program goes into full swing. We want to share that information with you. You'll be able to track your usage patterns by signing onto the Smart Sense homepage and clicking on the "Daily Usage Button." This link will help you better understand how you use electricity in your home and allow you to make effective changes in how you use electricity next summer.

Look for more emails in the near future that will help you begin to save energy and money through the Smart Sense program. We'll also be asking some pilot participants to respond to an electronic survey that will be critical to the success of the pilot.

Thanks again for joining the Smart Sense program. We look forward to continue working with you on this important initiative.

**Smart Sense**  
SAVE ENERGY. SMART!

---

Duquesne Light Smart Sense Team  
smartsense@duqlight.com  
www.duquesnelight.com/smartsense

**E-Mail to All Customers  
Survey Reminder**





*Dear Smart Sense Participant,*

**Just a quick note to remind you that we look forward to receiving your comments from the Smart Sense online survey.**

A link to the survey was sent yesterday to all Smart Sense participants. Your input will be of great assistance in helping to set pricing when our pilot program goes into full swing next summer. We also ask for feedback on our communications, the website and the link that details your electric usage.

Please remember that completing the survey is required to continue in the Smart Sense pilot. Thanks again for being part of the program.

**Smart Sense**  
SAVE ENERGY. SMART!

---

Duquesne Light Smart Sense Team  
smartsense@duqlight.com  
www.duquesnelight.com/smartsense

**E-Mail to TOD Customers  
Looking for Focus Group Participants**



*Dear Smart Sense Participant:*

You already may have received a call from Campos Research. However, we still need to fill a few spots for a Time of Day focus group scheduled from 5:30 p.m. to 7:30 p.m., Wednesday, Oct. 5, at Campos' facility in downtown Pittsburgh. For participating in this session, we are offering \$75 as a token of appreciation for your time. In addition, Duquesne Light will provide a light dinner as well as cover your parking costs.

This focus group is a follow-up to the on-line survey we recently conducted, and will further explore concepts associated with Time of Use rates. Information gathered through this research is critical to the success of the Smart Sense pilot. If you are interested in being part of the Oct. 5 focus group, please contact Rhonda Dalton of Campos at 412-471-8484, ext. 401. Calls can be made over the weekend.

Thanks for your participation in the Smart Sense program.



---

Duquesne Light Smart Sense Team  
smartsense@duqlight.com  
www.duquesnelight.com/smartsense

**Undeliverable E-Mails  
Update E-Mail Address**



***Dear Smart Sense Participant:***

Thank you for being part of Duquesne Light's Smart Sense pilot program. An important part of the program is for us to keep you informed about Smart Sense surveys as well as what to expect as the pilot continues. We recently received an undeliverable email reply from your email address that we have on file from when you registered for the Smart Sense program. In order to continue to be enrolled in the program, we need your current email address to enable us to send and receive communications with you. If you have already updated your email, please disregard this letter.

The following are instructions which direct you on how to update your email with us. Please follow the instructions and if you have any questions or issues feel free to email us.

For privacy reasons we ask that customers make updates to their email addresses themselves. To do this, after logging into our website at [www.duquesnelight.com](http://www.duquesnelight.com) click "Profile Information" in the upper right corner in the yellow bar. Next, click "Edit Profile." Note the email address that is currently on file. To update that email address, click the "Change Email for Login" button. Type the new email address and then re-type it to confirm. If you are enrolled in our Smart Sense pilot program you will see an option to "Update my Smart Sense email address as well." Please check this box if you would also like us to update the email address you provided for the Smart Sense pilot program which is used to send communications related to the Smart Sense program. Next, click the "Change" button. You will be redirected to the "Edit Profile Information" page and should see a message in red text that says "Account information updated." This completes the steps necessary to update your email address. Be sure to use this new email address the next time you log into our website. Please note if you are enrolled in e-Bill, our paperless billing option, this will also update the email address used for sending your e-Bill notification emails.

Look for more emails in the near future that will help you begin to save energy and money through the Smart Sense program. We'll also be asking some pilot participants to participate in focus groups that are another part of achieving a successful Smart Sense pilot.

**Duquesne Light Smart Sense Team**

[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)

**E-Mail Sent to All Smart Sense Participants  
Update E-Mail Address**



*Dear Smart Sense Participant:*

Thanks to all of you who took part in our first on-line survey. It was another important step to help us gain your input into our program design as well as gauge your interest in energy pricing and smart meters. We will share the results with you later this year.

We did have a problem contacting a handful of Smart Sense participants who have changed their email addresses since originally registering for the program. If you have changed your email, it's important that you update your Duquesne Light account, using the directions below. This will ensure we can continue to provide you pertinent information about the program.

**How to Update Your Email Address**

First, log onto our main company website, at [www.duquesnelight.com](http://www.duquesnelight.com). Click "Profile Information" in the upper right corner in the yellow bar. Next, click "Edit Profile," and then follow the prompts to update your email address. Be sure to check the box titled "Update my Smart Sense email address as well." Also, please note that if you are enrolled in e-Bill, our paperless billing option, this change also will update the email address used for sending your e-Bill notification emails. In addition, please add [smartsense@duqlight.com](mailto:smartsense@duqlight.com) to your address book to ensure that our emails reach your inbox.

Look for more emails from us in the near future that will help you begin to save energy and money through the Smart Sense program. In the next couple of weeks, we'll also be inviting some pilot participants to participate in focus groups.

Thanks again for being part of the Smart Sense program.



---

Duquesne Light Smart Sense Team  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)

**E-Mail Sent to Participants  
Who Switched Suppliers**





*Dear Smart Sense Participant,*

**Thank you for participating in Duquesne Light's Smart Sense pilot program.**

As noted in both the invitation letter and the enrollment agreement, you were required to continue to receive your electric supply from Duquesne Light throughout the entire pilot period (through November 2012) in order to receive a \$100 gift card as appreciation for completion of the program. Our records indicate you have switched from our default service to an electric generation supplier. We respect your right to switch. However, we have removed you from the pilot program and you no longer will be eligible to receive the \$100 card.

We value you as a customer and will continue to safely and efficiently deliver power to you. Please contact us if you have any questions.

**Smart Sense**  
SAVE ENERGY. SMART!

---

Duquesne Light Smart Sense Team  
smartsense@duqlight.com  
www.duquesnelight.com/smartsense

**MSI's E-Mail Communications  
In Regard to the Web Survey**

Subject: Duquesne Light would like your input



[[Restore full (customer) name from sample (if no name in sample, restore "Dear valued customer")]],

Thank you for being part of the Smart Sense program. Your participation will help us develop time-of-use rates – in conjunction with a smart-meter program – that will benefit all customers.

**As you may recall, all pilot participants are required to complete surveys periodically in order to receive a \$100 appreciation payment at the end of the program in November 2012.** Market Strategies International, an independent public opinion research company, has been retained by Duquesne Light to administer this survey. Your responses will be kept completely confidential. This survey is strictly for research purposes and is not connected with sales in any way. If you have any questions, please send an e-mail to [smartsense@duqlight.com](mailto:smartsense@duqlight.com).

Please follow these simple steps to access your survey.

1. Take note of your unique survey ID: [[pin]]
2. Go to <http://www.msisurvey.com/E11231> and enter your survey ID in the space provided.

This survey is expected to close 7 days from the date this e-mail was sent. Thank you for your time and thoughtful responses. Please keep in mind that you will be removed from the Smart Sense program if you do not complete the survey.

*NOTE: If you are unable to click on the link directly, please type the entire link into the Address or Location field at the top of your Web browser, and press the ENTER key on your keyboard to access the survey website.*

If you require technical assistance with the survey, please access Market Strategies' [Frequently Asked Questions \(FAQ\)](#) page for answers to common questions or go to Market Strategies' [Contact Support](#).

*\*\*\*Please do not reply to this e-mail, as this mailbox is not monitored. If you need technical support, please use the Contact Support link listed above. \*\*\**

---

**Smart Sense**  
SAVE ENERGY. SMART!

Subject: REMINDER: Duquesne Light would like your input



[[Restore full (customer) name from sample (if no name in sample, restore "Dear valued customer")]],

Recently we sent you an email inviting you to participate in a survey as part of your enrollment in the Smart Sense Program. Your participation will help us develop time-of-use rates – in conjunction with a smart-meter program – that will benefit all customers. As a reminder, the survey is closing on **Tuesday, August 23rd**. If you have not already done so, please take the time to complete this survey. We appreciate your time and value your thoughtful responses. Please keep in mind that you will be removed from the Smart Sense program if you do not complete the survey.

**As you may recall, all pilot participants are required to complete surveys periodically in order to receive a \$100 appreciation payment at the end of the program in November 2012.** Market Strategies International, an independent public opinion research company, has been retained by Duquesne Light to administer this survey. Your responses will be kept completely confidential. This survey is strictly for research purposes and is not connected with sales in any way. If you have any questions, please send an e-mail to [smartsense@duqlight.com](mailto:smartsense@duqlight.com).

Please follow these simple steps to access your survey.

1. Take note of your unique survey ID: [[pin]]
2. Go to <http://www.msisurvey.com/E11231> and enter your survey ID in the space provided.

*NOTE: If you are unable to click on the link directly, please type the entire link into the Address or Location field at the top of your Web browser, and press the ENTER key on your keyboard to access the survey website.*

If you require technical assistance with the survey, please access Market Strategies' [Frequently Asked Questions \(FAQ\)](#) page for answers to common questions or go to Market Strategies' [Contact Support](#).

*\*\*\*Please do not reply to this e-mail, as this mailbox is not monitored. If you need technical support, please use the Contact Support link listed above. \*\*\**

**Smart Sense**  
SAVE ENERGY. SMART!

Subject: REMINDER: Don't forget to finish your survey!



[[Restore full (customer) name from sample (if no name in sample, restore "Dear valued customer")]],

Recently we sent you an email inviting you to participate in a survey as part of your enrollment in the Smart Sense Program. It appears that you started the survey but have not yet finished it. We value your answers and would like you to complete the survey, so we are **extending the deadline to Friday, August 26<sup>th</sup>**. We appreciate your time and value your thoughtful responses. Your participation will help us develop time-of-use rates – in conjunction with a smart-meter program – that will benefit all customers. Please keep in mind that you will be removed from the Smart Sense program if you do not complete the survey.

**As you may recall, all pilot participants are required to complete surveys periodically in order to receive a \$100 appreciation payment at the end of the program in November 2012.** Market Strategies International, an independent public opinion research company, has been retained by Duquesne Light to administer this survey. Your responses will be kept completely confidential. This survey is strictly for research purposes and is not connected with sales in any way. If you have any questions, please send an e-mail to [smartsense@duqlight.com](mailto:smartsense@duqlight.com).

Please follow these simple steps to re-access your survey.

1. Take note of your unique survey ID: [[pin]]
2. Go to <http://www.msisurvey.com/E11231> and enter your survey ID in the space provided.

*NOTE: If you are unable to click on the link directly, please type the entire link into the Address or Location field at the top of your Web browser, and press the ENTER key on your keyboard to access the survey website.*

If you require technical assistance with the survey, please access Market Strategies' [Frequently Asked Questions \(FAQ\)](#) page for answers to common questions or go to Market Strategies' [Contact Support](#).

*\*\*\*Please do not reply to this e-mail, as this mailbox is not monitored. If you need technical support, please use the Contact Support link listed above. \*\*\**

**Smart Sense**  
SAVE ENERGY. SMART!

Subject: REMINDER: Duquesne Light would like your input



[[Restore full (customer) name from sample (if no name in sample, restore "Dear valued customer")]],

Recently we sent you an email inviting you to participate in a survey as part of your enrollment in the Smart Sense Program. Your participation will help us develop time-of-use rates – in conjunction with a smart-meter program – that will benefit all customers. **We are extending the deadline** to give you the opportunity to participate. The survey is closing on **Friday, August 26th**. If you have not already done so, please take the time to complete this survey. We appreciate your time and value your thoughtful responses. Please keep in mind that you will be removed from the Smart Sense program if you do not complete the survey.

**As you may recall, all pilot participants are required to complete surveys periodically in order to receive a \$100 appreciation payment at the end of the program in November 2012.** Market Strategies International, an independent public opinion research company, has been retained by Duquesne Light to administer this survey. Your responses will be kept completely confidential. This survey is strictly for research purposes and is not connected with sales in any way. If you have any questions, please send an e-mail to [smartsense@duqlight.com](mailto:smartsense@duqlight.com).

Please follow these simple steps to access your survey.

1. Take note of your unique survey ID: [[pin]]
2. Go to <http://www.msisurvey.com/E11231> and enter your survey ID in the space provided.

*NOTE: If you are unable to click on the link directly, please type the entire link into the Address or Location field at the top of your Web browser, and press the ENTER key on your keyboard to access the survey website.*

If you require technical assistance with the survey, please access Market Strategies' [Frequently Asked Questions \(FAQ\)](#) page for answers to common questions or go to Market Strategies' [Contact Support](#).

*\*\*\*Please do not reply to this e-mail, as this mailbox is not monitored. If you need technical support, please use the Contact Support link listed above. \*\*\**

**Smart Sense**  
SAVE ENERGY. SMART!

Subject: Thank you for survey participation



Thank you for recently participating in the Smart Sense survey. Your input is very valuable to us in our efforts to develop potential time-of-use programs and to improve our service to customers like you. If you have any further questions, please send an e-mail to [smartsense@duqlight.com](mailto:smartsense@duqlight.com).

Sincerely,

*The Smart Sense Team*

*\*\*\*Please do not reply to this e-mail, as this mailbox is not monitored. \*\*\**

**Smart Sense**  
SAVE ENERGY. SMART!

---

Subject: Duquesne Light would like your input



[[Restore full (customer) name from sample (if no name in sample, restore "Dear valued customer")]],

At Duquesne Light, one of the most important ways we obtain suggestions to improve service is through customer surveys. We would like to invite you to participate in a web survey about issues that relate to how our customers use energy in their homes.

Duquesne Light is in the early stages of a program to install "smart-meter" technology throughout Allegheny and Beaver counties that will help residential customers, like you, better understand and manage your electric costs. Your participation will help us develop time-of-use rates – in conjunction with a smart-meter program – that will benefit all customers.

Market Strategies International, an independent public opinion research company, has been retained by Duquesne Light to administer this survey. Your responses will be kept completely confidential. This survey is strictly for research purposes and is not connected with sales in any way. If you have any questions, please send an e-mail to [smartsense@duqlight.com](mailto:smartsense@duqlight.com).

Please follow these simple steps to access your survey.

1. Take note of your unique survey ID: [[pin]]
2. Go to <http://www.msisurvey.com/E11213> and enter your survey ID in the space provided.

This survey is expected to close 7 days from the date this e-mail was sent. Thank you for your time and thoughtful responses.

*NOTE: If you are unable to click on the link directly, please type the entire link into the Address or Location field at the top of your Web browser, and press the ENTER key on your keyboard to access the survey website.*

If you require technical assistance with the survey, please access Market Strategies' [Frequently Asked Questions \(FAQ\)](#) page for answers to common questions or go to Market Strategies' [Contact Support](#).

If you do not want to participate in this survey, please click on this link: [Remove Me](#).

*\*\*\*Please do not reply to this e-mail, as this mailbox is not monitored. If you need technical support, please use the Contact Support link listed above. \*\*\**



Search by Category	Search by Keyword
Show All	<input type="text"/>
<input type="button" value="Go"/>	<input type="button" value="Go"/>

#### Market Strategies International - General Questions

- [Who is Market Strategies International? How do I find out more about the company?](#)
- [What is Market Strategies International's Privacy Policy?](#)
- [FRAUD ALERT - Mystery Shopping Scam](#)

#### Market Strategies International - Contact Lists: Changes/Removal Questions

- [May I contact your clients/vendors directly in order to update contact information with them or to be removed from their lists?](#)
- [I am on the National Do Not Call Registry list. Why are you calling me about survey participation?](#)
- [How can I be removed from your email or phone contact lists?](#)
- [How can I be removed from your postal mail contact lists? Can I update my postal mailing address for surveys?](#)
- [Can I change the method \(i.e.: postal mail, email, phone, fax\) by which Market Strategies International contacts me for surveys?](#)

#### All Surveys - General Questions

- [Who will see my survey answers and how will they be used?](#)
- [Why do you ask personal information questions in your surveys? \(i.e., age, income, etc.\)](#)
- [How can I sign up for surveys from Market Strategies International? Do you have market research panels?](#)

#### All Surveys - Honorarium/Incentive Payment Questions

- [How do I know if a survey is offering an incentive, honorarium or sweepstakes?](#)
- [What does it mean when the survey invite states that one must "qualify for and complete" the survey in order to receive the honorarium/incentive?](#)
- [I recently participated in a survey and I have not yet received my honorarium/incentive payment. Can you help?](#)

#### Web Surveys - General Questions

- [How long does it take to complete a web survey?](#)
- [Which web browsers work best with your surveys?](#)
- [How do I access a survey via the Survey URL \(web address\) link from an email invitation?](#)
- [When accessing the survey, or after answering a few questions, I was told that the "quota was filled". What does this mean?](#)
- [I was only asked a couple of questions in the survey and then was told "these are all the questions we have for you" and the survey ended. What does this mean?](#)
- [I received a postal mail or fax invitation to your survey. How do I access the survey site?](#)
- [My email doesn't display a "clickable" link to the survey. How else can I access the survey site?](#)
- [After answering a few questions in the survey, I was told I did not qualify for the survey. What does this mean?](#)
- [When I access or resume the survey, I am getting a message that states that the "survey is closed". What does this mean?](#)

#### Web Surveys - Technical Questions

- [What is my survey ID number?](#)
- [When I access or while in the survey, I get a "timeout" error or the web browser will not load the page. What do I do?](#)
- [When I attempt to access the survey, I am redirected to a page that has the following red error text: "We apologize, but we are unable to locate the specific survey project that you are trying to access..." What do I do?](#)
- [I am a WebTV \(now MSNTV\) user and I am having trouble accessing/completing the survey. What do I do?](#)
- [While answering questions in the survey, I seem to be caught in an endless loop of the same question – What do I do?](#)
- [What if my question is not answered here or I am still experiencing problems?](#)
- [After entering in my survey ID, I get a message: "ID not found or this survey is already open. Please wait 10 minutes and try again." What do I do?](#)
- [I'm getting a "page not found" or "page cannot be displayed" or a "404 error" when attempting to access the survey or while moving to the next question in the survey. What do I do?](#)
- [I have clicked buttons or checked boxes in the survey, but nothing is happening. What do I do?](#)
- [Can I stop in the middle of taking a survey and return to it at a later time to finish? Will I lose any of my survey answers?](#)
- [How do I go back and change an answer in a survey?](#)

- I am an AOL user and I am having trouble accessing/completing the survey. What do I do?
  - When attempting to access the survey link, I am getting a message that states "Please wait while the survey is loading.", however, the survey never loads. What do I do?
  - I accessed your survey via a survey vendor panel link (i.e.: ePocrates, eRewards, etc.). At the end of the survey, I received an "unable to service request" message. What do I do and did my survey get submitted?
-

# Survey Support

Please complete and submit the form below. If you wish to be removed from Market Strategies' email or phone contact lists, please complete our [Do Not Contact](#) form. If you are looking for information regarding updating or removing postal mailing addresses, please read our [Frequently Asked Questions](#).

All contact information that you supply is kept confidential and will only be used to resolve your support request. The majority of the identifying information requested below can often be found in your survey invitation email or letter.

*\* indicates required field*

**\*Name:**

**\*Email Address:**

**Phone:**

**Name/Topic of the survey:**

**Survey ID:**

**Project Number:**

**Please choose your issues from the list below (check all that apply):**

- Technical problems with survey
- Survey content issues
- Honorarium/Incentive Issues
- Other

**\*Please leave your comments regarding your concern and/or the survey below. Document your concern or question as completely as possible—additional identifying information will help us to better resolve your support issue. If you received your survey invite from a survey panel (i.e., e-Rewards, SurveySpot, ePocrates, etc.), please COPY AND PASTE your entire email invitation (including survey link) in the space below.**

## **Pre-Paid Debit Card E-Mail to Customers**

**Smart Sense Pilot Program**  
**Pre-Paid Debit Card E-Mail to Customers**  
**Sent: April 19, 2011**

Dear Smart Sense Participant:

Thank you for taking the time to enroll in Duquesne Light's Smart Sense Pilot Program and for completing the Demographic Survey. In appreciation, your \$20 pre-paid debit card has been sent for processing and you should be receiving it in about three weeks.

As a reminder, and as noted in the invitation letter and the program's terms and conditions, participants must receive their electric supply from Duquesne Light Company throughout the Smart Sense pilot.

Thanks again for joining the Smart Sense pilot. We'll continue to stay in touch with you throughout the program.

Sincerely,

Duquesne Light Smart Sense Team  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

**Please Complete Demographic Survey  
E-Mail to Customers**

**Reminder E-Mail – Please Complete Demographic Survey  
Sent March 28, 2011**

Thanks for your interest in Duquesne Light Company's Smart Sense pilot program. Customer response has been very strong and we soon will be closing registration.

This is a reminder that in order to complete your registration process and receive a \$20 pre-paid debit card, you must complete and submit the Demographic Survey found in the "What We Need from You" section on the Smart Sense home page [www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense).

If for some reason you no longer want to be part of the pilot, please e-mail us at [smartsense@duqlight.com](mailto:smartsense@duqlight.com) with a request to be removed from the Smart Sense program.

We encourage you to complete the registration process. However, if we do not receive your completed survey or an e-mail request for removal by Friday, April 1, you will be removed from the program and no longer will be eligible for any incentives the company may have offered.

Contact us at the email link if you have any questions.

Duquesne Light Smart Sense Team  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

**Reminder E-Mail – Please Complete Demographic Survey  
Sent April 4, 2011**

Thanks for your interest in Duquesne Light Company's Smart Sense pilot program. Customer response has been very strong and we soon will be closing registration.

This is a reminder that in order to complete your registration process and receive a \$20 pre-paid debit card, you must complete and submit the Demographic Survey found in the "What We Need from You" section on the Smart Sense home page [www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense) .

If for some reason you no longer want to be part of the pilot, please e-mail us at [smartsense@duqlight.com](mailto:smartsense@duqlight.com) with a request to be removed from the Smart Sense program.

We encourage you to complete the registration process. However, if we do not receive your completed survey or an e-mail request for removal by Friday, April 8, you will be removed from the program and no longer will be eligible for any incentives the company may have offered.

As a reminder, and as noted in the invitation letter and the program's terms and conditions, participants must receive their electric supply from Duquesne Light Company throughout the Smart Sense pilot.

Contact us at the email link if you have any questions.

Duquesne Light Smart Sense Team  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)



**Reminder E-Mail – Please Complete Demographic Survey  
Sent April 13, 2011**

Thanks for your interest in Duquesne Light Company's Smart Sense pilot program. Customer response has been very strong and we soon will be closing registration.

This is a reminder that in order to complete your registration process and receive a \$20 pre-paid debit card, you must complete and submit the Demographic Survey found in the "What We Need from You" section on the Smart Sense home page [www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense) .

If for some reason you no longer want to be part of the pilot, please e-mail us at [smartsense@duqlight.com](mailto:smartsense@duqlight.com) with a request to be removed from the Smart Sense program.

We encourage you to complete the registration process. However, if we do not receive your completed survey or an e-mail request for removal by Friday, April 15, you will be removed from the program and no longer will be eligible for any incentives the company may have offered.

As a reminder, and as noted in the invitation letter and the program's terms and conditions, participants must receive their electric supply from Duquesne Light Company throughout the Smart Sense pilot.

Contact us at the email link if you have any questions.

Duquesne Light Smart Sense Team  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

**Reminder E-Mail – Please Complete Demographic Survey  
Sent April 19, 2011**

Thanks for your interest in Duquesne Light Company's Smart Sense pilot program. Customer response has been very strong and we soon will be closing registration.

This is a reminder that in order to complete your registration process and receive a \$20 pre-paid debit card, you must complete and submit the Demographic Survey found in the "What We Need from You" section on the Smart Sense home page [www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense).

If for some reason you no longer want to be part of the pilot, please e-mail us at [smartsense@duqlight.com](mailto:smartsense@duqlight.com) with a request to be removed from the Smart Sense program.

We encourage you to complete the registration process. However, if we do not receive your completed survey or an e-mail request for removal by Friday, April 25, you will be removed from the program and no longer will be eligible for any incentives the company may have offered.

As a reminder, and as noted in the invitation letter and the program's terms and conditions, participants must receive their electric supply from Duquesne Light Company throughout the Smart Sense pilot.

Contact us at the email link if you have any questions.

Duquesne Light Smart Sense Team  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

## **Inactive Account E-Mail to Customers**

**Smart Sense Pilot Program  
E-Mail to Customers  
Account Inactive - No Longer Eligible for Program  
Sent: Various**

Thank you for your interest in the Smart Sense program. Our records show that the account you enrolled with is no longer active. As a result, you are not eligible for the program.

Please feel free to contact us if you have any questions.

Duquesne Light Smart Sense Team  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

**Alpha Electronic Meter Installation  
Confirmation E-Mail to Customers**

**Smart Sense Pilot Program  
Time-of-Day Option Selection  
Confirmation E-Mail to Customers that Alpha Electronic Meter Installed  
Sent: May 23, 2011**

Dear Smart Sense Participant:

We are writing to let you know that the Alpha electronic meter installation at your residence is complete.

Thanks for selecting the time-of-day pilot program. If you have any questions, please contact us at [smartsense@duqlight.com](mailto:smartsense@duqlight.com).

Sincerely,

Duquesne Light Smart Sense Team  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

PS - As a reminder, and as noted in the invitation letter and the program's terms and conditions, participants must continue to receive their electric supply from Duquesne Light Company throughout the Smart Sense pilot.

**Pilot Program Options Selection  
E-Mail to Customers**

**What We Need from You**  
**Smart Sense Pilot Program Options Selection E-Mail to Customers**  
**Sent: April 20, 2011**

Dear Smart Sense Participant:

Please take a look at the "Smart Sense Pilot Program Options" on the "What We Need from You" section of the Smart Sense website, [www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense) . There you'll be able to view short profiles of both pilots and indicate which option you'd like to be considered for. You also can indicate if you don't have a preference.

We encourage you to view the profiles and indicate a preference, if any, by Wednesday, April 27. We will make every effort to place you in your preferred pilot. However, as noted in the participation agreement, if there is over- and/or under-enrollment in either pilot, Duquesne Light reserves the right to place customers in the pilot that is not fully subscribed.

Thanks again for joining Smart Sense. We'll continue to stay in touch with you throughout the program.

Sincerely,

Duquesne Light Smart Sense Team  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

PS -- As a reminder, and as noted in the invitation letter and the program's terms and conditions, participants must receive their electric supply from Duquesne Light Company throughout the Smart Sense pilot.



**Confirmation E-Mail to Customers Who  
Did Not Respond to the Program  
Preference E-Mail**

**Smart Sense Pilot Program  
Time-of-Week Option Selection  
Confirmation E-Mail to Customers Who Did Not Respond  
Sent: May 10, 2011**

Dear Smart Sense Participant:

Thank you for enrolling in Duquesne Light Company's Smart Sense Pilot Program.

Since we have not received a response from you in regard to your program preference, and due to strong customer interest in the Time-of-Day program, we have enrolled you in the Time-of-Week Pilot Program. This option offers a great opportunity to learn more about how you use electricity and save money at the same time.

Please be on the lookout for e-mail communications in the near future. We look forward to working with you as we develop this program together.

Sincerely,

Duquesne Light Smart Sense Team  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

PS - As a reminder, and as noted in the invitation letter and the program's terms and conditions, participants must continue to receive their electric supply from Duquesne Light Company throughout the Smart Sense pilot.

"Time-of-Day" and "Time-of-Week" were set as hyperlinks for the customer's information and use. The hyperlinked documents are attached.

## Smart Sense Pilot Program Option

- **Time-of-Day Pilot Program** — This pilot will evaluate your response to electricity supply rates that are based on the time-of-day and day-of-week. Like the time-of-week pilot program, we'll be collecting your baseline electricity usage data in 2011, for comparison. And, the only action needed on your part in this first phase of the pilot will be periodic on-line or telephone surveys and — for some participants — focus groups. Also, later this fall, we'll be sending you free energy-saving products and tips. Then, for the months of June, July and August of 2012, we'll evaluate how you respond to electric supply rates that are designed based on the time-of-day, benefitting those who shift their usage from peak periods to non-peak periods. For example, we may offer a higher supply rate from 2 p.m. to 7 p.m. on weekdays, the peak period of energy usage, and a lower supply rate for all other weekday hours and on weekends. **Please note that there is no guarantee of savings on your electric bill as part of this program. Customers must actively participate and be willing and able to shift their peak weekday usage in 2012 in order to potentially benefit from this pricing program.** Since we need to submit the supply rates to the Pennsylvania Public Utility Commission for approval, the specifics of the time-of-day pilot program, including peak and off-peak supply rate options, will not be available until January 2012. The time-of-day pilot program is limited to about 100 customers because of the nature of the equipment required.\*\*

\*\*The equipment for the pilot will be an Alpha electronic meter capable of recording and storing energy consumption in hourly intervals and transmitting it back to Duquesne Light Company. You do not need to be at home when the equipment is installed. A brief outage will be required to install this equipment. We apologize for any inconvenience this may cause.

## Smart Sense Pilot Program Options

- Time-of-Week Pilot Program** — This pilot will evaluate your ability to reduce your electricity use on weekdays during the summer of 2012. In 2011, we'll be collecting your baseline electricity use data, for comparison. The only action needed on your part in this first phase of the pilot will be periodic on-line or telephone surveys and — for some participants — focus groups. Later this fall, we will provide a variety of free energy-saving products and tips for you to put into use. Then, in the summer of 2012, we'll see how you have responded to these free products and ideas. As an added incentive, customers who reduce their 2012 electricity use by at least 10 percent (10%) in the months of June, July and/or August below their 2011 baseline kilowatt-hour usage will receive an additional 10 percent (10%) incentive credit on the supply charge portion on their bill for those months.\* In other words, if you reduce your 2012 electricity usage by at least 10 percent (10%) in any or all of those months, not only will you save money by reducing your usage, we will credit you for doing so. As an example:

Time-of-Week Pilot Program Example				
Monthly Electricity Use				
	June 2011	June 2012	June 2012 Savings	June 2012 % Savings
Kilowatt-hour (kWh)	1000	900	100	10%
Supply Charge - ¢ per kWh	7.86	7.86		
	\$78.60	\$70.74		
Supply Charge	$\$78.60 - \$70.74 =$		\$7.86	
Smart Sense Pilot Program Incentive Credit	$\$70.74 \times 10\% =$		\$7.07	
Net June 2012 Savings	$\$7.86 + \$7.07 =$		\$14.93	

\*Incentive bill credits may take up to two full billing cycles to be processed.

**Confirmation E-Mail to Customers Who  
Chose the TOW Program**

**Smart Sense Pilot Program  
Time-of-Week Option Selection  
Confirmation E-Mail to Customers Who Chose Time-of-Week  
Sent: May 9, 2011**

Dear Smart Sense Participant:

Thank you for responding to the April 20 "What We Need from You - Smart Sense Pilot Program Options" survey.

Based on your response, you have been enrolled in the Time-of-Week Pilot Program. This program offers a great opportunity to learn more about how you use electricity and save money at the same time.

Please be on the lookout for e-mail communications in the near future. We look forward to working with you as we develop this program together.

Sincerely,

Duquesne Light Smart Sense Team  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

PS - As a reminder, and as noted in the invitation letter and the program's terms and conditions, participants must continue to receive their electric supply from Duquesne Light Company throughout the Smart Sense pilot.

"Time-of-Week" was set as a hyperlink for the customer's information and use. The hyperlinked document is attached.

## Smart Sense Pilot Program Options

- Time-of-Week Pilot Program** — This pilot will evaluate your ability to reduce your electricity use on weekdays during the summer of 2012. In 2011, we'll be collecting your baseline electricity use data, for comparison. The only action needed on your part in this first phase of the pilot will be periodic on-line or telephone surveys and — for some participants — focus groups. Later this fall, we will provide a variety of free energy-saving products and tips for you to put into use. Then, in the summer of 2012, we'll see how you have responded to these free products and ideas. As an added incentive, customers who reduce their 2012 electricity use by at least 10 percent (10%) in the months of June, July and/or August below their 2011 baseline kilowatt-hour usage will receive an additional 10 percent (10%) incentive credit on the supply charge portion on their bill for those months.\* In other words, if you reduce your 2012 electricity usage by at least 10 percent (10%) in any or all of those months, not only will you save money by reducing your usage, we will credit you for doing so. As an example:

Time-of-Week Pilot Program Example				
Monthly Electricity Use				
	June 2011	June 2012	June 2012 Savings	June 2012 % Savings
Kilowatt-hour (kWh)	1000	900	100	10%
Supply Charge - ¢ per kWh	7.86	7.86		
	\$78.60	\$70.74		
Supply Charge	\$78.60 - \$70.74 =		\$7.86	
Smart Sense Pilot Program Incentive Credit	\$70.74 x 10% =		\$7.07	
Net June 2012 Savings	\$7.86 + \$7.07 =		\$14.93	

\*Incentive bill credits may take up to two full billing cycles to be processed.

**Confirmation E-Mail to Customers Who  
Chose the TOD Program**



**Smart Sense Pilot Program  
Time-of-Day Option Selection  
Confirmation E-Mail to Customers Who Chose Time-of-Day  
Sent: April 29, 2011**

Dear Smart Sense Participant:

Congratulations! As requested, you have been enrolled in the Smart Sense Time-of-Day Pilot Program.

As noted in the pilot program descriptions on the Smart Sense website, a Duquesne Light Company meter technician will replace your home meter in the coming weeks. Installation will involve a short power interruption when the existing equipment is removed. We apologize for any inconvenience this may cause. Please note that enrollment in the time-of-day program is subject to Duquesne Light's ability to install the required equipment at your home. In the event that we are unable to install the equipment (obstructions, shrubbery, etc.), we will inform you of the situation and determine the appropriate course of action, which could involve enrolling you in the time-of-week program.

Thanks for selecting the time-of-day pilot program. We look forward to working with you as we develop this program together. Please be on the lookout for additional e-mail communications in the near future.

Sincerely,

Duquesne Light Smart Sense Team  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

PS - As a reminder, and as noted in the invitation letter and the program's terms and conditions, participants must continue to receive their electric supply from Duquesne Light Company throughout the Smart Sense pilot.

"Time-of-Day," "replace" and "time-of-week" were set as hyperlinks for the customer's information and use. Hyperlinked documents are attached.

## Smart Sense Pilot Program Option

- **Time-of-Day Pilot Program** — This pilot will evaluate your response to electricity supply rates that are based on the time-of-day and day-of-week. Like the time-of-week pilot program, we'll be collecting your baseline electricity usage data in 2011, for comparison. And, the only action needed on your part in this first phase of the pilot will be periodic on-line or telephone surveys and — for some participants — focus groups. Also, later this fall, we'll be sending you free energy-saving products and tips. Then, for the months of June, July and August of 2012, we'll evaluate how you respond to electric supply rates that are designed based on the time-of-day, benefitting those who shift their usage from peak periods to non-peak periods. For example, we may offer a higher supply rate from 2 p.m. to 7 p.m. on weekdays, the peak period of energy usage, and a lower supply rate for all other weekday hours and on weekends. **Please note that there is no guarantee of savings on your electric bill as part of this program. Customers must actively participate and be willing and able to shift their peak weekday usage in 2012 in order to potentially benefit from this pricing program.** Since we need to submit the supply rates to the Pennsylvania Public Utility Commission for approval, the specifics of the time-of-day pilot program, including peak and off-peak supply rate options, will not be available until January 2012. The time-of-day pilot program is limited to about 100 customers because of the nature of the equipment required.\*\*

\*\*The equipment for the pilot will be an Alpha electronic meter capable of recording and storing energy consumption in hourly intervals and transmitting it back to Duquesne Light Company. You do not need to be at home when the equipment is installed. A brief outage will be required to install this equipment. We apologize for any inconvenience this may cause.

## Smart Sense Pilot Program

### Equipment

- If I am selected to receive new equipment, who will do the work?

A Duquesne Light Company meter technician will remove your current equipment and replace it with new equipment. We will not be using non-Duquesne Light Company employees to install the equipment.

- How will I know that the person coming to my home to replace my equipment is a Duquesne Light employee?

The meter technician will arrive in a vehicle with a Duquesne Light Company logo and the employee will wear a uniform having Duquesne Light Company appearing on their shirt. In addition, the meter technician will carry a Duquesne Light Company ID card.

- What is the name of the new equipment being installed at my home and how is it different from my current equipment?

The equipment is an Alpha electronic meter capable of recording and storing energy consumption in hourly intervals. The twenty-four hourly intervals are electronically transmitted back to Duquesne Light Company once per day. Your existing equipment does not have the capability to record consumption in intervals.

- Is the new equipment that you are installing at my home a Smart Meter?

No. The Alpha electronic meter is not a smart meter.

- Will the new equipment that you are installing at my home interfere with any of my home equipment?

No. The new equipment will not cause any interference with your home equipment.

- If I am selected to receive new equipment, do I need to be home to have it installed?

No. The Duquesne Light Company meter technician is able to perform all necessary work without entry into your home.

- Will I experience an outage during the installation of the new equipment?

Yes. You will experience a short power interruption when the existing equipment is removed. We apologize for any inconvenience this may cause.

- How will I know if my current equipment has been replaced with new equipment?

Duquesne Light Company will notify you by e-mail prior to when your equipment is scheduled for replacement. In addition, after the work has been completed, the meter technician will leave a door hanger indicating that the work is complete and the Smart Sense Team will follow-up with an e-mail.

## Smart Sense Pilot Program Options

- Time-of-Week Pilot Program** — This pilot will evaluate your ability to reduce your electricity use on weekdays during the summer of 2012. In 2011, we'll be collecting your baseline electricity use data, for comparison. The only action needed on your part in this first phase of the pilot will be periodic on-line or telephone surveys and — for some participants — focus groups. Later this fall, we will provide a variety of free energy-saving products and tips for you to put into use. Then, in the summer of 2012, we'll see how you have responded to these free products and ideas. As an added incentive, customers who reduce their 2012 electricity use by at least 10 percent (10%) in the months of June, July and/or August below their 2011 baseline kilowatt-hour usage will receive an additional 10 percent (10%) incentive credit on the supply charge portion on their bill for those months.\* In other words, if you reduce your 2012 electricity usage by at least 10 percent (10%) in any or all of those months, not only will you save money by reducing your usage, we will credit you for doing so. As an example:

Time-of-Week Pilot Program Example				
Monthly Electricity Use				
	June 2011	June 2012	June 2012 Savings	June 2012 % Savings
Kilowatt-hour (kWh)	1000	900	100	10%
Supply Charge - ¢ per kWh	7.86	7.86		
	\$78.60	\$70.74		
Supply Charge	$\$78.60 - \$70.74 =$		\$7.86	
Smart Sense Pilot Program Incentive Credit	$\$70.74 \times 10\% =$		\$7.07	
Net June 2012 Savings	$\$7.86 + \$7.07 =$		\$14.93	

\*Incentive bill credits may take up to two full billing cycles to be processed.

**Confirmation E-Mail to Customers Who  
Were Placed on the TOD Waiting List and  
Later Moved Into the TOD Program**

**Smart Sense Pilot Program  
Time-of-Day Option Selection  
Confirmation E-Mail to Customers Who Were Placed on the TOD Waiting List and  
Into the TOW Program and Subsequently Moved Into the TOD Program  
Sent: May 17, 2011**

Dear Smart Sense Participant:

We recently sent you an e-mail indicating that due to strong customer response, you were placed on a waiting list for the [time-of-day](#) pilot program. We are pleased to let you know that a spot did open up and you are now enrolled in the Smart Sense Time-of-Day Pilot Program.

As noted in the pilot program descriptions on the Smart Sense website, a Duquesne Light Company meter technician will [replace](#) your home meter shortly. Installation will involve a short power interruption when the existing equipment is removed. We apologize for any inconvenience this may cause.

Please note that enrollment in the time-of-day program is subject to Duquesne Light's ability to install the required equipment at your home. In the event that we are unable to install the equipment (obstructions, shrubbery, etc.), we will inform you of the situation and determine the appropriate course of action, which could involve enrolling you in the [time-of-week](#) program.

Thanks for selecting the time-of-day pilot program. We look forward to working with you as we develop this program together. Please be on the lookout for additional e-mail communications in the near future.

Sincerely,

Duquesne Light Smart Sense Team  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

PS - As a reminder, and as noted in the invitation letter and the program's terms and conditions, participants must continue to receive their electric supply from Duquesne Light Company throughout the Smart Sense pilot.

"Time-of-Day," "replace" and "time-of-week" were set as hyperlinks for the customer's information and use. Hyperlinked documents are attached.

**Confirmation E-Mail to Customers Who  
Requested TOD but Received TOW**

**Smart Sense Pilot Program  
Time-of-Week Option Selection  
Confirmation E-Mail to Customers Who Requested TOD but Received TOW  
Sent: May 9, 2011**

Dear Smart Sense Participant:

Thank you for responding to the April 20th "What We Need from You - Smart Sense Pilot Program Options" survey.

Due to strong customer interest, we are unable to satisfy your request to enroll in the Time-of-Day pilot program. We have included you on a waiting list in the event that an opening does occur.

In the meantime, we have enrolled you in the Time-of-Week Pilot Program. This program also offers a great opportunity to learn more about how you use electricity and save money at the same time.

Please be on the lookout for e-mail communications in the near future. We look forward to working with you as we develop this program together.

Sincerely,

Duquesne Light Smart Sense Team  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

PS - As a reminder, and as noted in the invitation letter and the program's terms and conditions, participants must continue to receive their electric supply from Duquesne Light Company throughout the Smart Sense pilot.

"Time-of-Week" was set as a hyperlink for the customer's information and use. The hyperlinked document is attached.



## Smart Sense Pilot Program Options

- Time-of-Week Pilot Program** — This pilot will evaluate your ability to reduce your electricity use on weekdays during the summer of 2012. In 2011, we'll be collecting your baseline electricity use data, for comparison. The only action needed on your part in this first phase of the pilot will be periodic on-line or telephone surveys and — for some participants — focus groups. Later this fall, we will provide a variety of free energy-saving products and tips for you to put into use. Then, in the summer of 2012, we'll see how you have responded to these free products and ideas. As an added incentive, customers who reduce their 2012 electricity use by at least 10 percent (10%) in the months of June, July and/or August below their 2011 baseline kilowatt-hour usage will receive an additional 10 percent (10%) incentive credit on the supply charge portion on their bill for those months.\* In other words, if you reduce your 2012 electricity usage by at least 10 percent (10%) in any or all of those months, not only will you save money by reducing your usage, we will credit you for doing so. As an example:

Time-of-Week Pilot Program Example				
Monthly Electricity Use				
	June 2011	June 2012	June 2012 Savings	June 2012 % Savings
Kilowatt-hour (kWh)	1000	900	100	10%
Supply Charge - ¢ per kWh	7.86	7.86		
	\$78.60	\$70.74		
Supply Charge	\$78.60 - \$70.74 =		\$7.86	
Smart Sense Pilot Program Incentive Credit	\$70.74 x 10% =		\$7.07	
Net June 2012 Savings	\$7.86 + \$7.07 =		\$14.93	

\*Incentive bill credits may take up to two full billing cycles to be processed.

**Confirmation E-Mail to Customers Who  
Were Placed in the TOD Program and  
Later Moved Into the TOW Program  
Due to Obstructions at the Meter Socket**

**Smart Sense Pilot Program  
Time-of-Week Option Selection  
Confirmation E-Mail to Customers Who Were Placed in the TOD Program and  
Subsequently Moved Into the TOW Program Due to Obstructions at Meter Socket  
Sent: Various**

Dear Smart Sense Participant:

In our April 29, 2011, e-mail, we informed you that you were enrolled in the Smart Sense Time-of-Day Pilot, subject to our ability to install the equipment needed for you to be part of that program. Based on our inspection of the area where the meter is connected at your home, we unfortunately are unable to install the required equipment because of physical obstruction(s) at the meter socket.

As a result, we have enrolled you in the Smart Sense Time-of-Week Pilot. This program also offers a great opportunity to learn more about how you use electricity and save money at the same time.

Please be on the lookout for e-mail communications in the near future. We look forward to working with you as we develop this program together.

Sincerely,

Duquesne Light Smart Sense Team  
[www.duquesnelight.com/smartsense](http://www.duquesnelight.com/smartsense)  
[smartsense@duqlight.com](mailto:smartsense@duqlight.com)

PS - As a reminder, and as noted in the invitation letter and the program's terms and conditions, participants must receive their electric supply from Duquesne Light Company throughout the Smart Sense pilot.

---

"Time-of-Week" was set as a hyperlink for the customer's information and use. The hyperlinked document is attached.

## Smart Sense Pilot Program Options

- Time-of-Week Pilot Program** — This pilot will evaluate your ability to reduce your electricity use on weekdays during the summer of 2012. In 2011, we'll be collecting your baseline electricity use data, for comparison. The only action needed on your part in this first phase of the pilot will be periodic on-line or telephone surveys and — for some participants — focus groups. Later this fall, we will provide a variety of free energy-saving products and tips for you to put into use. Then, in the summer of 2012, we'll see how you have responded to these free products and ideas. As an added incentive, customers who reduce their 2012 electricity use by at least 10 percent (10%) in the months of June, July and/or August below their 2011 baseline kilowatt-hour usage will receive an additional 10 percent (10%) incentive credit on the supply charge portion on their bill for those months.\* In other words, if you reduce your 2012 electricity usage by at least 10 percent (10%) in any or all of those months, not only will you save money by reducing your usage, we will credit you for doing so. As an example:

Time-of-Week Pilot Program Example				
Monthly Electricity Use				
	June 2011	June 2012	June 2012 Savings	June 2012 % Savings
Kilowatt-hour (kWh)	1000	900	100	10%
Supply Charge - c per kWh	7.86	7.86		
	\$78.60	\$70.74		
Supply Charge	$\$78.60 - \$70.74 =$		\$7.86	
Smart Sense Pilot Program Incentive Credit	$\$70.74 \times 10\% =$		\$7.07	
Net June 2012 Savings	$\$7.86 + \$7.07 =$		\$14.93	

\*Incentive bill credits may take up to two full billing cycles to be processed.

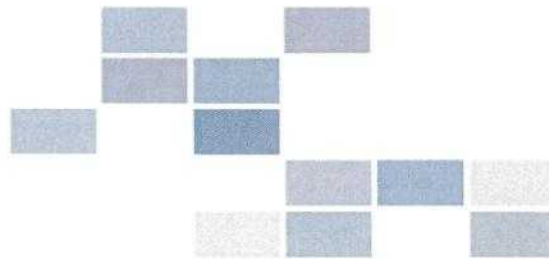
---

## Attachment 12

---

## Web Survey & Discreet Choice Analysis Research Report

Duquesne Light Company  
2011 Smart Sense Research  
Final Report



MARKETSTRATEGIES  
INTERNATIONAL

## Report Contents

▪ Background and Research Methodology	3
▪ Key Findings	4
▪ Research Implications	10
– Perceptions of Time-of-Use Rates vs. Fixed Rates	11
– Time-of-Use Pricing Concept Discrete Choice Analysis	16
– Energy Knowledge, Attitudes, and Behaviors	31
– Smart Sense Program Enrollment Materials	37
– Program Website and Smart Sense Team Interactions	44
– General Impressions of Duquesne Light	48
– Survey Demographics	53
– Appendix	55

MARKETSTRATEGIES  
INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART!

## Background and Research Methodology

### *Background*

- Duquesne Light is currently considering the development of several potential "time-of-use" (TOU) electricity rate and electricity usage reduction rebate concepts in conjunction with its Smart Sense pilot program offerings.
- In order to assist Duquesne Light to determine the optimal TOU electricity rate and usage reduction rebate levels to potentially offer customers, a web-based survey was conducted with Residential Smart Sense program participants and General Residential customers to determine their likelihood to participate in several electricity rate or electricity usage reduction rebate program concepts.
- The web survey also explored other topics related to knowledge and perceptions of TOU, household energy usage and conservation, as well as feedback on interactions with the Smart Sense program.

### *About the Research*

- A total of 1,492 web surveys were collected – 1,094 with Time-of-Week Smart Sense participants, 98 Time-of-Day Smart Sense participants, and 300 General Residential customers.
  - The surveys were collected between August 16<sup>th</sup> and August 29<sup>th</sup>, 2011.
- Customers were sent an original survey invite and up to two email reminders requesting them to participate in the survey.
- The survey length averaged approximately 17 minutes.

## Key Findings

### *Basic Understanding and Preferences for Time-of-Use Rates*

- Smart Sense program participants – particularly those in the Time-of-Day program, have a better understanding of the concept of "Time-of-Use" (TOU) pricing compared to General Residential customers.
- Four out of five (79%) Time-of-Day participants and 64% of Time-of-Week participants would prefer TOU rates over flat rates, compared to 51% of General Residential customers. Between 12% and 23% of customers in each segment was unable to select a preferred approach prior to being presented with the program concepts.
- Most of the Time-of-Day program participants (87%) feel that charging for what energy actually costs based on time of usage is a "fair" approach, while 70% of Time-of-Week participants and 60% of General Residential customers feel that it would be a fair approach.
  - While saving money would be the strongest motivation for customer's willingness to adopt a TOU rate approach, interest is also influenced by customer's willingness to shift usage habits and wanting to have more flexibility and control over their usage.
- For communications about electricity pricing plans, customers prefer the following approaches:
  - An email message or electronic brochure sent by email
  - A detailed brochure received through regular mail
  - Simple information included in the bill
  - A web page or electronic brochure on the Duquesne Light website

## Key Findings

### *Time-of-Use Rates and Usage Reduction Rebate Program Concepts*

- Differences in TOU program preferences are evident, with the Rebate and the savings levels associated with the Time-of-Day programs having the greatest impact on customer share of preference.
- However, the on-peak end times and the time of year (Year round vs. Summer) have little impact on customer share of preference levels.
- Among the three primary program concepts tested, the Rebate concept receives the strongest share of preference\* among all segments.
  - Between 41% and 45% of customers surveyed would be likely to participate in a Time-of-Day program if the on-peak rate was one and a half times higher than off-peak. This increases to 46%-50% at three times on- versus off-peak and achieves 50%-56% share of preference at five times on- versus off-peak pricing.
  - The Time-of-Week concept achieves a 41%-42% share of preference at the lowest rate level tested, and increases to a 45%-47% share at the highest rate level tested.
  - Approximately one-half (49%) of customers surveyed would have interest in an Energy Reduction Rebate program at the lowest rebate levels (\$2/\$4/\$6). This steadily increases to 57%-59% at the mid-level rebates (\$5/\$10/\$15) and to 63%-65% at the highest rebate offering tested (\$10/\$20/\$30).
- Although share of preference levels do not widely differ by customer segment, Time-of-Day participants generally show the highest share of preference for the concepts presented.

\*Note: Share of preference overstates real-world market behavior. It is not a market forecast.

MARKETSTRATEGIES  
INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART!

5

## Key Findings

### *General Energy Knowledge and Attitudes*

- Most customers believe it is important to conserve energy in their homes as much as possible and feel that the topic of energy efficiency is not difficult to understand. Additionally, the majority of customers feel they are "very knowledgeable" about how to conserve energy.
- Not surprisingly, "saving money" is the most often mentioned primary motivation for conserving energy, and is followed by "environmental benefits." In addition to saving money and the environment, the most often mentioned motivations for conserving energy include "U.S. energy independence/security" and "for future generations."
- Most customers feel they are at least somewhat knowledgeable about the actions they can take to make their homes more energy efficient and about the environmental impacts of using their home appliances and equipment, though only a small proportion feel they "know a lot" about each topic.
- Nearly all customers would advocate for Duquesne Light to provide more to them than just their monthly electric bill.
  - Customers specifically mention having TOU rates, detailed energy usage analysis, energy conservation tips, and energy audits as potential information and services that Duquesne Light could provide to customers.
  - The majority of customers indicate knowing at least a little about the programs and services that Duquesne Light currently has available to help customers save energy.

MARKETSTRATEGIES  
INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART!

6



## Key Findings

### *Smart Sense Program Enrollment Motivations and Materials*

- The primary motivations cited by Smart Sense participants for enrolling in the program are to "become more aware of their energy usage" and "save money."
- The key motivations cited for opening the Smart Sense program envelope when it arrived were because it was from Duquesne Light, as well as because of the statements "Save Energy" and "Earn \$120" listed on the envelope.
- Most Smart Sense participants say that the program invitation letter and brochure were appealing and most at least skimmed the materials. In addition, most customers feel that the program materials were both understandable and useful.
- Just 15% of Smart Sense participants had questions after reading the materials.
  - More than half of these customers accessed the FAQs on the Smart Sense website to address their questions and most of them were able to locate the information they needed from the FAQs.
  - If they were unable to obtain the necessary information from the FAQs, some customers followed up with the Smart Sense team via email or used another method to locate the information to answer their questions.

## Key Findings

### *Smart Sense Program Website and Customer Service Interactions*

- Only a small proportion of Smart Sense customers (4%-7%) had issues accessing the Smart Sense website.
  - Issues mentioned related to general access, navigation, and account set-up.
- Just 3% of Smart Sense participants say they have contacted the Smart Sense team.
  - Of these customers, most say they used the "Contact Us" button on the website.
  - Most of these customers feel that their request was handled properly and in a timely manner by the Smart Sense team.
- Six in ten (59%) Time-of-Day and 39% of Time-of-Week participants have viewed their household's energy usage since being notified that the information was made available on the Smart Sense website. Most customers that have accessed the information feel it is "useful."
- The majority of Smart Sense customers (80% of Time-of-Day and 72% of Time-of-Week) are satisfied with the information provided on the Smart Sense website.

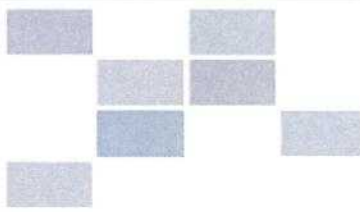
## Key Findings

### *Customer Satisfaction, Perceptions of Electric Price/Rates and Other General Performance*

- Nearly all customers (88%+) are satisfied with Duquesne Light and this strong level of satisfaction is on par with the performance consistently measured in the ongoing tracking research being conducted with customers by telephone.
- However, the total positive response for most of the other survey measures that are also asked in the ongoing tracker is lower in the Web study versus telephone. This is due to a higher proportion of customers on the Web selecting the mid-point scale point (i.e., 5 rating or "neither") or not being able to provide a valid response to the question (i.e., Don't know responses). Interestingly, when the Don't know responses are removed from the percentage calculations, the total positive results for many of these measures are much closer to the results from the telephone research.

## Research Implications

- With customers being so highly satisfied with the company and because a large proportion indicate specifically wanting Duquesne Light to provide them with more energy-related information, the company likely has a built-in advocacy group that would be open to the idea of participating in programs that offer them the opportunity to control their usage and potentially lower their monthly bills.
- Generally speaking, customers have a good understanding of the concepts of energy conservation and time-of-use, and a consistent theme identified is that customers are motivated to save money on their electric bills. The results further suggest that customers would find the availability of a variable rate program acceptable and a fair approach as compared to the current flat rate approach.
- While Duquesne Light may choose to offer multiple programs focused on different types of energy users, customers tended to prefer the Energy Reduction Rebate program concept compared to the Time-of-Day and Time-of-Week concepts. The Rebate program concept may be more accepted due, in part, to the likelihood that customers would prefer to participate in a program that offers them more flexibility in how their household uses electricity, and rewards them if they are able to change habits and reduce their household's usage. Changing the usage behaviors of average customers is a barrier to the success of these types of programs and the reward concept may seem to be most realistic to customers, as shifting usage to coincide with specific timeframes each day or shifting usage from weekdays to weekends is likely to require a larger investment than customers are initially willing to make to realize any real savings.
- Despite the fact that customers in the Smart Sense pilot programs are not fully realizing the planned benefits of the programs in 2011, feedback thus far is primarily positive when it comes to any materials they have received or any interactions that have taken place with the Smart Sense team or with the use of the program website.



## Perceptions of Time-of-Use Rates vs. Fixed Rates

MARKETSTRATEGIES Smart Sense  
SAVE ENERGY. SMART.

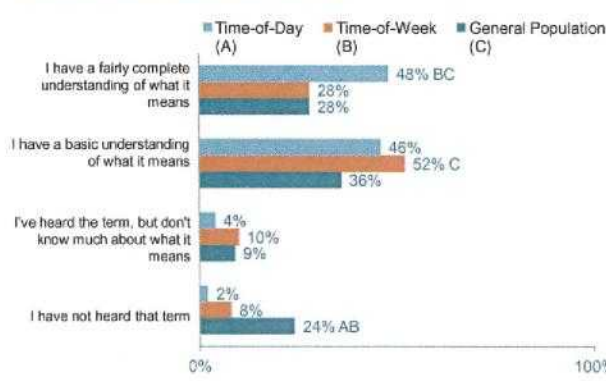
11

### Time-of-Use Pricing Concept Understanding

*Program participants have a better understanding than average customers.*

Only a small proportion of Smart Sense participants have not heard of Time-of-Use pricing, while General Residential customers show a weaker understanding of the concept.

#### Familiarity with Time-of-Use Pricing



Understanding Level	Time-of-Day (A)	Time-of-Week (B)	General Population (C)
I have a fairly complete understanding of what it means	48% BC	28%	28%
I have a basic understanding of what it means	45%	52% C	36%
I've heard the term, but don't know much about what it means	4%	10%	9%
I have not heard that term	2%	8%	24% AB

YTD Comparison to Residential Tracker

12%

23%

25%

39%

Q33. Which of the following statements comes closest to describing your current level of knowledge about Time of Use pricing. Letters indicate significant differences between groups at the 95% confidence interval.

MARKETSTRATEGIES Smart Sense  
SAVE ENERGY. SMART.

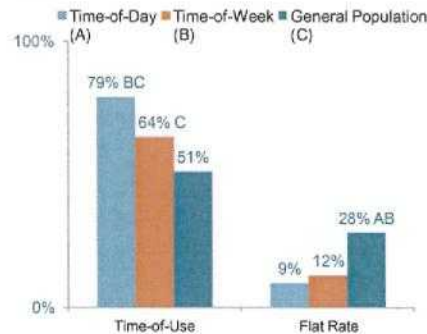
12

## Time-of-Use Pricing vs. Flat Rate Pricing

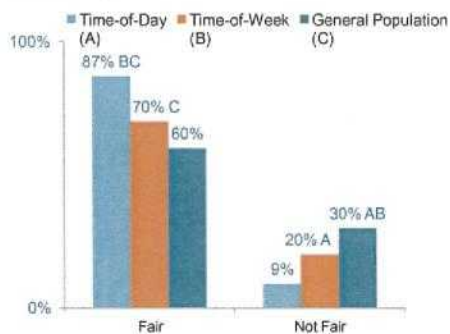
*Time-of-Use pricing is seen as a viable and fair approach.*

While the preference levels vary widely by segment, customers show a willingness to choose Time-of-Use rates over flat rates. They also feel that charging customers the actual cost of energy based on time of usage is a "fair" approach.

Preference of Rate Schedule  
%Yes



Opinion of Time-of-Use Rates  
Fair vs. Not fair



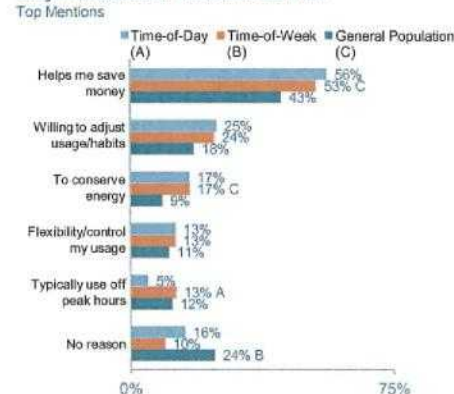
Q23. Would you prefer to have:  
Q21. Do you think that charging customers rates that reflect what energy actually costs – with higher rates during high demand periods, and lower rates during low demand periods, is:  
Letters indicate significant differences between groups at the 95% confidence interval.

## Reasons for Interest in Time-of-Use Pricing

*Not surprisingly, saving money is the primary driver of interest in TOU.*

Besides saving money, interest in Time-of-Use is influenced by customer's willingness to shift usage habits and wanting to have more flexibility and control over their usage.

Why Interested in Time-of-Use Plan



Base size: Time of Day=77, Time of Week=75, General Population=153  
Q23Q2: Why would you be interested in a plan that offers different electricity rate options?  
Letters indicate significant differences between groups at the 95% confidence interval.  
Note: Top mentions include mentions greater than 5% at the aggregate level.

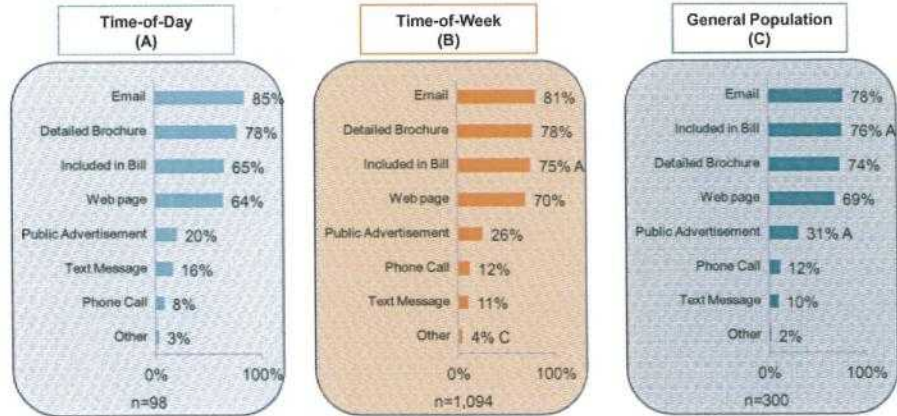
Word Cloud of Verbatim Comments



## Ways to Learn About Time-of-Use Pricing Plans

*Electronic-based communications have strong customer appeal.*

Along with traditional communications channels (*information with the bill, detailed brochures in the mail*), email and web-based offerings are appealing to most customers.

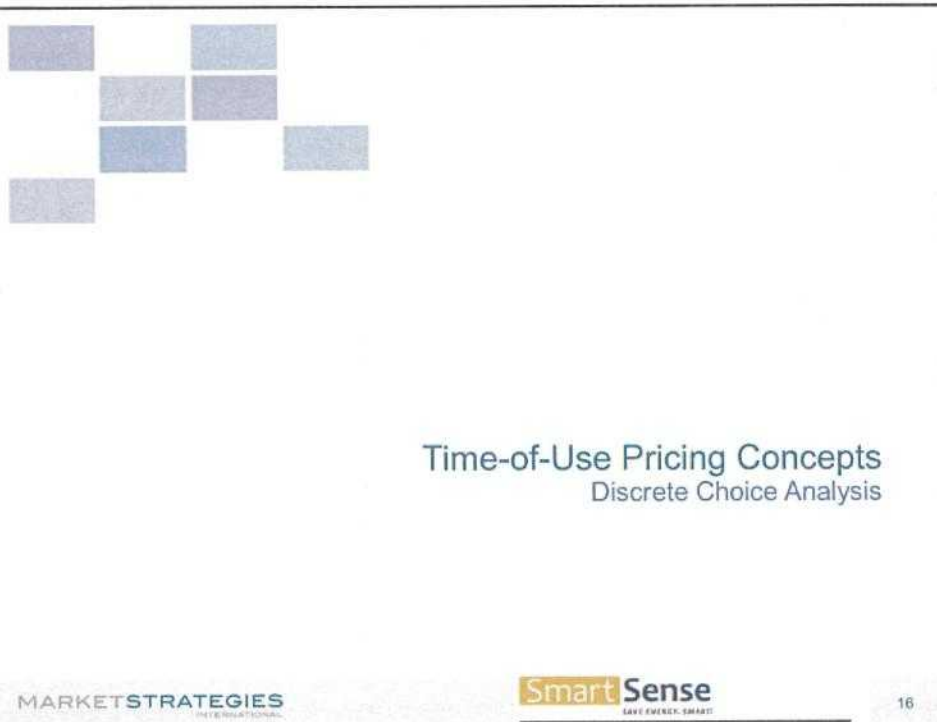


Q29-Q30C. For each of the following, please indicate whether or not it would be a good way to inform your household about electricity pricing plans and ways to lower energy costs. Letters indicate significant differences between groups at the 95% confidence interval.

MARKETSTRATEGIES  
INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART.

15



## Discrete Choice Methodology

- A discrete choice modeling analysis allows Duquesne Light to determine the most preferred levels within a feature for each of several potential TOU pricing concepts. The features are aspects or building blocks that drive selection decisions, and are important considerations in a consumer's decision-making process.
- For this analysis, participants examined features or attributes for three TOU pricing concepts and then made adjustments or trade-offs to determine their likelihood to participate in each program. The discrete choice modeling analysis examines the trade-offs to determine the combination of attributes that will be most satisfying to potential users and predicts the level of preference each program might achieve.
- The analysis provides several valuable pieces of information:
  - **Importances** convey the relative importance of each feature in determining likelihood to participate decisions.
  - **Preference scores** convey which levels of a feature are the most preferred and least preferred.
  - **Share of preference** helps to understand what the potential is for each program concept and what aspects are contributing most to the preference levels. By simulating changes the relative benefit of various combinations of the levels of different features can be identified. Further, changes that most increase or decrease preference, and those that have only slight impacts, can be better understood.

\*Note: Preference overstates real-world market behavior. It is not a market forecast.

## Discrete Choice Features and Levels

Time of Day		Rebate		
Time of Year	Summer Months (June through September) Year round	Time of Year	Summer Months (June through September) Year round	
On-peak End Time	6pm 7am	Rebate Offering	Household reduces its weekday electricity usage by 5% compared to a baseline period; receive a \$2 rebate	
On-Peak Length	3 hours 4 hours 5 hours		Household reduces its weekday electricity usage by 10% compared to a baseline period; receive a \$4 rebate	
On-Peak and Off-Peak Rates	On-Peak rate is 1½ times the Off-Peak rate (On-Peak = 10.91; Off-Peak = 7.27)		Household reduces its weekday electricity usage by 15% compared to a baseline period; receive a \$6 rebate	
	On-Peak rate is 2 times the Off-Peak rate (On-Peak = 13.33; Off-Peak = 6.67)		Household reduces its weekday electricity usage by 5% compared to a baseline period; receive a \$5 rebate	
	On-Peak rate is 3 times the Off-Peak rate (On-Peak = 17.14; Off-Peak = 5.71)		Household reduces its weekday electricity usage by 10% compared to a baseline period; receive a \$10 rebate	
	On-Peak rate is 4 times the Off-Peak rate (On-Peak = 20; Off-Peak = 5)		Household reduces its weekday electricity usage by 15% compared to a baseline period; receive a \$15 rebate	
	On-Peak rate is 5 times the Off-Peak rate (On-Peak = 22.22; Off-Peak = 4.44)		Household reduces its weekday electricity usage by 5% compared to a baseline period; receive a \$10 rebate	
Time of Week			Rebate	
Time of Year	Summer Months (June through September) Year round		Time of Year	Summer Months (June through September) Year round
Weekday and Weekend Rates	Weekday rate is 1½ times the Weekend rate (Weekday = 9.23; Weekend = 6.15)		Household reduces its weekday electricity usage by 5% compared to a baseline period; receive a \$10 rebate	
	Weekday rate is 2 times the Weekend rate (Weekday = 10; Weekend = 5)	Household reduces its weekday electricity usage by 10% compared to a baseline period; receive a \$20 rebate		
	Weekday rate is 2½ times the Weekend rate (Weekday = 10.53; Weekend = 4.21)	Household reduces its weekday electricity usage by 15% compared to a baseline period; receive a \$30 rebate		
	Weekday rate is 3 times the Weekend rate (Weekday = 10.91; Weekend = 3.64)			

## Discrete Choice Exercises

- Each respondent viewed 18 randomized scenarios where a program was configured with certain features varied.
- On each screen, respondents were asked to review and indicate their likelihood to participate in each program.
- Data generated by the respondent choices were then modeled to produce a simulation of how likely or unlikely respondents would be to participate in the program.

If the program below was available, how likely would you be to participate in the program?

**New Program: Time of Day**  
 On-Peak rate is 3 times higher than the Off-Peak rate  
 On-Peak hours are 20hr - 24hr Monday-Friday (15 hrs per week)  
 Summer months (June through September)

**Example:** The average household uses about 20% of its electricity during "on-peak" hours and 80% during "off-peak" hours. Assume the average household's electric bill is \$100 per month on a flat rate.

How is what would happen to the household's bill under the program?

Change in Use	Standard Cost	Time of Day Cost	Monthly Savings
Household shifts 30% of its total electricity use to on-peak (20% on-peak/70% off-peak)	\$100	\$115	-\$15
No change, the household continues to use electricity as usual (20% on-peak/80% off-peak)	\$100	\$100	\$0
Household shifts 50% of its total electricity use to off-peak (10% on-peak/90% off-peak)	\$100	\$89	\$11
Household shifts 100% of its total electricity use to off-peak (10% on-peak/90% off-peak)	\$100	\$79	\$21

The table above is intended to give you a sense of the possible savings under the program. Your potential savings of course could be different, depending on how you currently use electricity.

Based on the program description and example, how likely would you be to participate in this program?

- I definitely would participate
- I probably would participate
- I might or might not participate
- I probably would not participate
- I definitely would not participate

## Time-of-Use Pricing/Reward Concept Description

Today, nearly all residential customers pay the same flat rate for electricity no matter when they use it during the day or night. Some utilities are beginning to offer customers time-of-use rates. Under this type of rate plan customers would be charged less for electricity if they changed the timing of their electricity usage during certain times of the day, or on certain days of the week. In addition, some utilities are also considering rebate programs that incent customers to reduce electricity consumption during certain periods of time.

In the next set of exercises, you will be shown several possible programs to evaluate:

- Time-of-Day** programs that are based on the time of the day that electricity is used. Similar to peak pricing used for air travel, cell phones, hotel stays, etc., time of day electric rates mean that customers would pay lower rates during hours of the day of low electricity demand (off-peak) and higher rates during periods of higher electricity demand (on-peak).
- Time-of-Week** programs that are based on the day of the week that electricity is used. In these programs customers would pay lower rates during weekends, when electricity demand is lower and higher rates during weekdays (Monday through Friday) when electricity demand is higher.
- Weekday Reduction Rebate** programs that are based on reducing electricity consumption during weekdays (Monday through Friday). These programs offer incentives to customers in the form of a rebate with the level of rebate determined based on a customer's usage in their current period measured against a like prior period, or "baseline" period. The "baseline" period would be the same period of time, such as a week or month, as the current period. For example, customers may be paid a rebate to reduce their electricity consumption in August 2011 by 10% compared to their electricity consumption in August 2010, the "baseline" month.

For each program shown, you will be asked how likely you would be to participate in such a program, if it were offered.

## Overall Findings

*Program type and rate/rewards levels are the most important features.*

- Differences in Time-of-Use program preferences were observed, with Rebate and the rates associated with the Time-of-Day programs having the greatest impact on customer share of preference.
- The time of year changes in rates (Summer vs. Year round) have very minimal impact on preference regardless of program type.

### Rebate

- As the rebate rate increases so does preference

### Time-of-Day

- Greater difference in the On- vs. Off-peak rates reveals higher preference rates
- Length of on-peak rate has little influence, possibly due to respondents not understanding the differences or the length would have little effect on their daily energy consumption
- Customers prefer to have a 6pm start time for the off-peak rates

### Time-of-Week

- Greater difference in the On- vs. Off-peak rates reveals higher preference rates

## Program Feature and Level Importance

Regardless of program concept, rates or reward offerings have the strongest importance in customers likelihood to choose to participate in a TOU program.

Program Feature Importance  
% Important



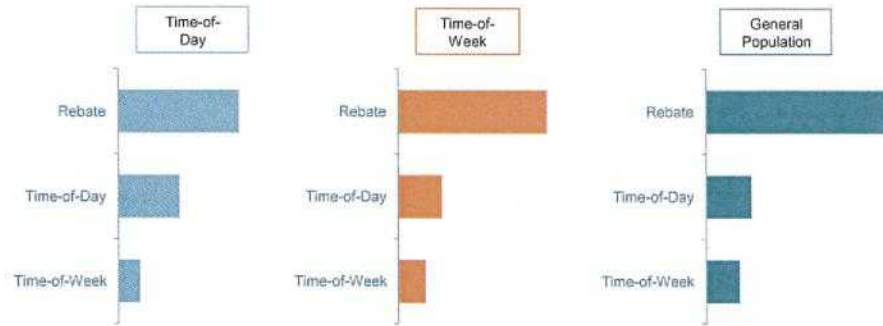


## Program Preference

Customers would most prefer a rebate program.

In contrast, a Time-of-Week program is the least preferred program type.

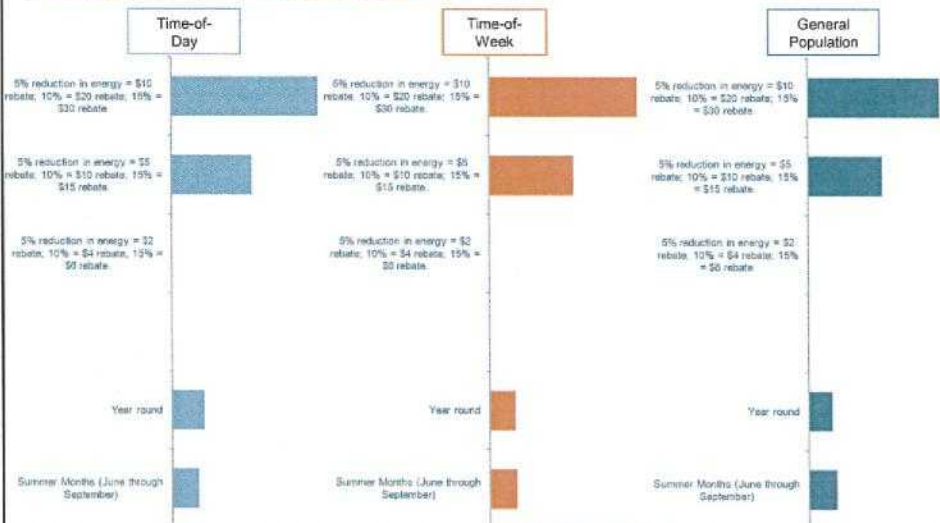
### Program Preference



## Energy Reduction Rebate Program Preferences

Higher rebates are most preferable, while there is not a distinct advantage identified among customers when it comes to time of year.

### Preference among Rebate Program Features

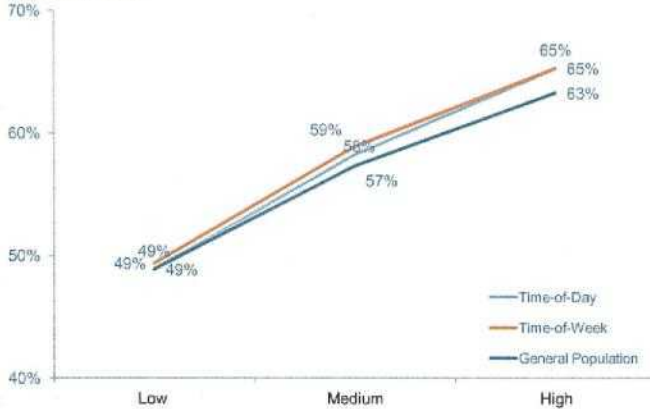


## Energy Reduction Rebate Program

About half of customers would have interest in the energy reduction rebate program concept at the lowest rebate levels.

### Rebate Program Preference\*

Share of Preference



Note: Set for Year round. Low \$254/\$3, Medium \$9/\$10/\$15, High \$10/\$20/\$30.  
\*Share of preference overstates real-world market behavior. It is not a market forecast.

MARKETSTRATEGIES INTERNATIONAL

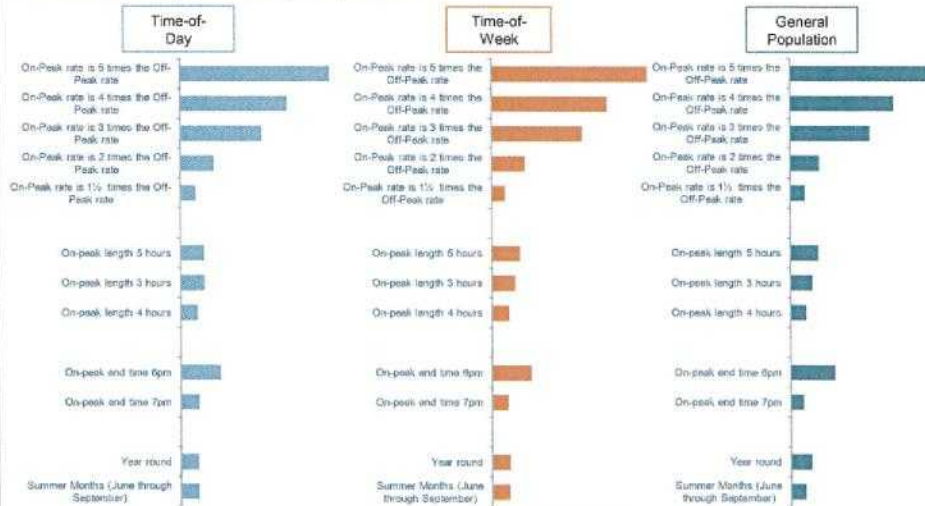
Smart Sense  
SAVE ENERGY. SMART!

25

## Time-of-Day Program Preferences

Preference increases as potential savings levels improve. However, there is not much variation by on-peak length, end time, or time of year.

### Preference among Time-of-Day Program Features



MARKETSTRATEGIES INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART!

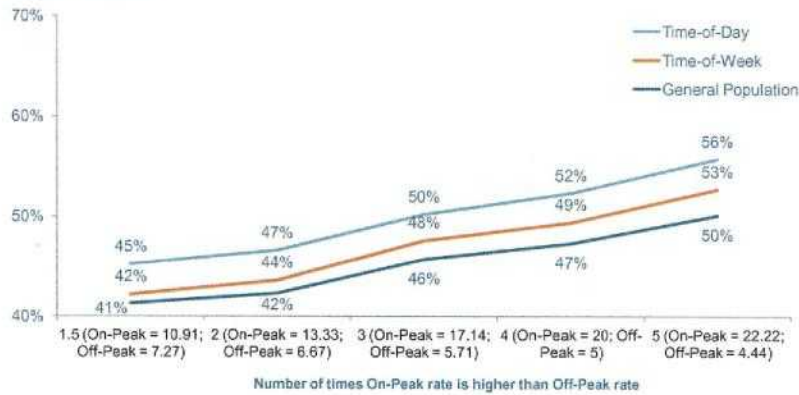
26

## Time-of-Day Program Preferences

*Time-of-Day enrolled customers show the highest preference levels.*

As the difference in On- versus Off-Peak rates increases, so does the share of preference for the program.

**Time-of-Day Program Preference\***  
Share of Preference



Base case: On-Peak period=5 hours, End time=9pm, Set for Year round  
\*Share of preference overstates real-world market behavior. It is not a market forecast.

MARKETSTRATEGIES INTERNATIONAL

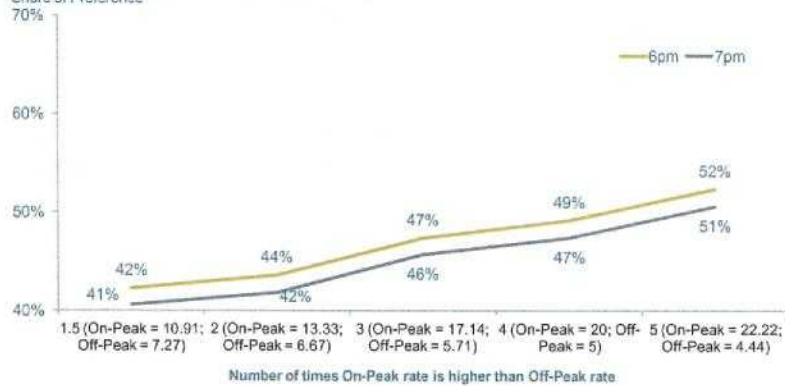
Smart Sense  
SAVE ENERGY. SMART!

27

## Time-of-Day Program Preferences

*On-Peak End Time has little impact on share of preference levels.*

**Time-of-Day Program Preference\***  
Share of Preference



Base case: On-Peak period=5 hours, Set for Year round  
\*Share of preference overstates real-world market behavior. It is not a market forecast.

MARKETSTRATEGIES INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART!

28

## Time-of-Week Program Preferences

*While preference increases as the potential savings levels improve, the changes are not as substantial as for the Time-of-Day program concept.*

### Preference among Time-of-Week Program Features



MARKETSTRATEGIES  
BY TECHNOLOGY

Smart Sense  
SAFE ENERGY. SMART!

29

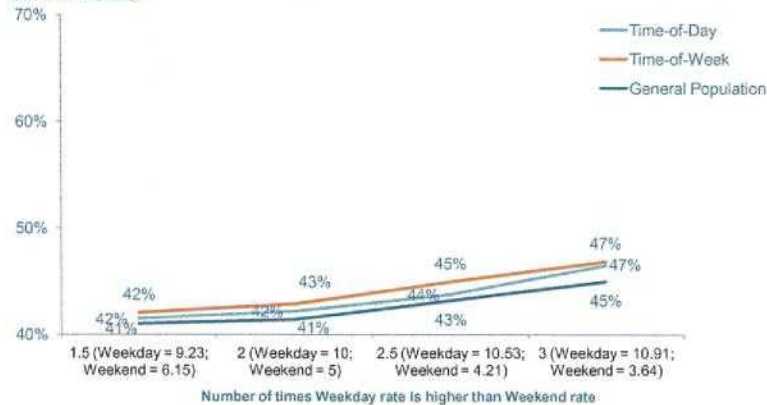
## Time-of-Week Program Preferences

*Time-of-Week programs are least preferred.*

Time-of-Week programs are less preferred compared to Rebate and Time-of-Day programs, and show little difference across rate/savings levels.

### Time-of-Week Program Preference\*

Share of Preference

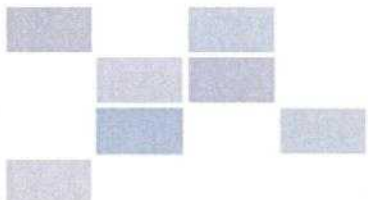


Base case: Set for Year round  
\*Share of preference overstates real-world market behavior. It is not a market forecast.

MARKETSTRATEGIES  
BY TECHNOLOGY

Smart Sense  
SAFE ENERGY. SMART!

30



## Energy Knowledge, Attitudes, and Behaviors

MARKETSTRATEGIES INTERNATIONAL
Smart Sense  
SAVE ENERGY. SMART.
31

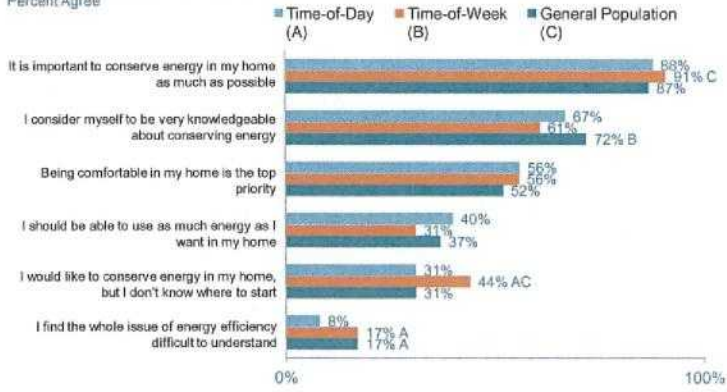
### Attitudes and Behaviors Toward Energy Usage

*Most customers realize the importance of conserving energy and feel that the issue of energy efficiency is not difficult to understand.*

Furthermore, the majority of customers consider themselves to be very knowledgeable about how to conserve energy. Agreement is lukewarm when it comes to customer's feeling that being comfortable in their home is a top priority or that they should be able use energy as they choose.

#### Energy Efficiency, Communications, and Programs

Percent Agree



Statement	Time-of-Day (A)	Time-of-Week (B)	General Population (C)
It is important to conserve energy in my home as much as possible	69%	61%	67%
I consider myself to be very knowledgeable about conserving energy	67%	61%	72% B
Being comfortable in my home is the top priority	56%	55%	52%
I should be able to use as much energy as I want in my home	40%	37%	37%
I would like to conserve energy in my home, but I don't know where to start	31%	31%	44% AC
I find the whole issue of energy efficiency difficult to understand	8%	17% A	17% A

Q10-Q15: For the next set of questions, please focus on how you feel about using energy. For each statement, please select the degree to which you agree or disagree. Letters indicate significant differences between groups at the 95% confidence interval.

MARKETSTRATEGIES INTERNATIONAL
Smart Sense  
SAVE ENERGY. SMART.
32

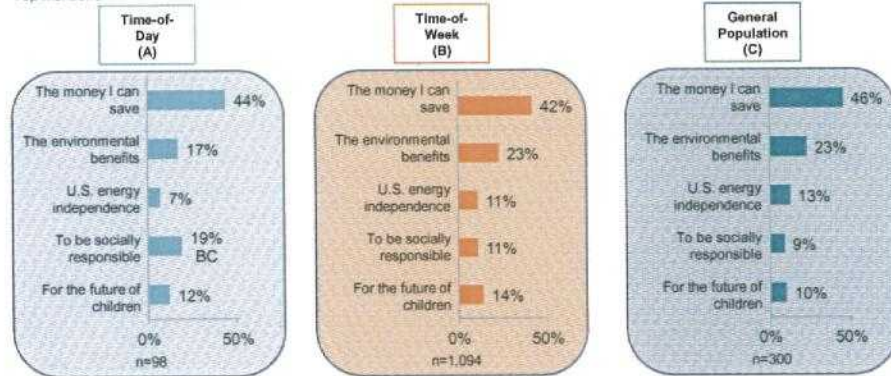
## Most Important Reason to Conserve Energy

*Saving money is the primary driver for conserving energy.*

*Environmental benefits* is a second place motivator among both Time-of-Week and General Residential customers, with Time-of-Day customers placing *social responsibility* higher than the environment.

### Main Reason to Conserve

Top Mentions



Q18. In your personal opinion, which of the following is the most important reason to conserve energy? (Select one)  
Letters indicate significant differences between groups at the 95% confidence interval.

MARKETSTRATEGIES INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART.

33

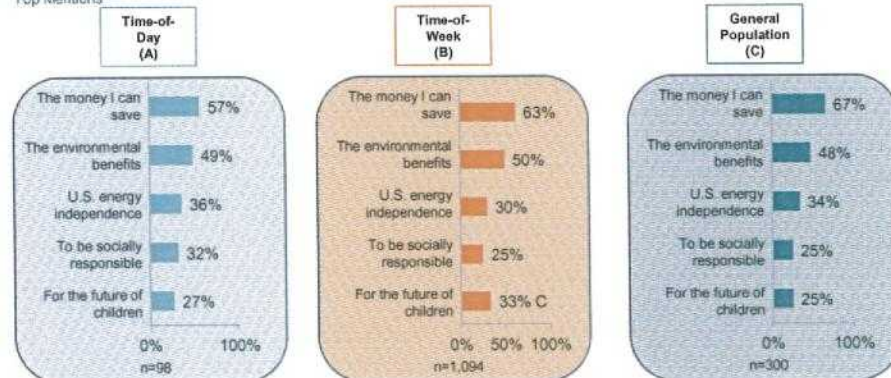
## Total Reasons to Conserve Energy

*Besides saving money and the environment, energy independence is also a key motivator for conserving energy.*

*Saving money* is the top motivation for conserving energy among customers under the age of 45 and those with incomes under \$100K. More customers over the age of 45 and those with higher incomes mention *energy independence* as their primary motivation for conserving.

### Reasons to Conserve

Top Mentions



Q18-Q19A. In your personal opinion, which of the following is the most/second most important reason to conserve energy?  
Letters indicate significant differences between groups at the 95% confidence interval.

MARKETSTRATEGIES INTERNATIONAL

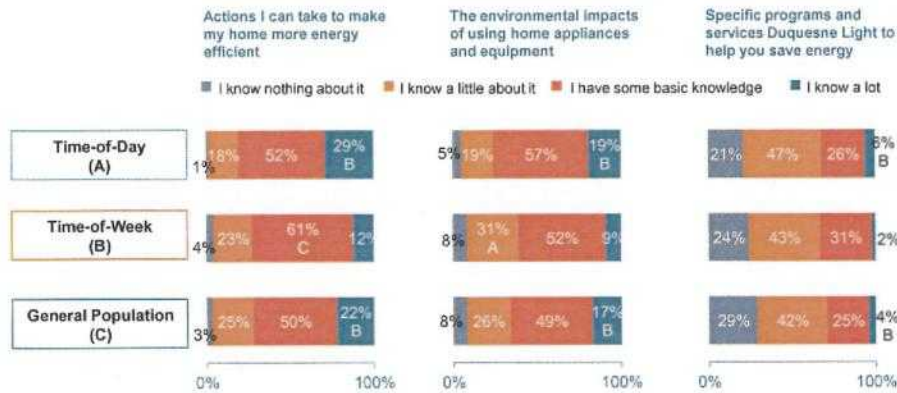
Smart Sense  
SAVE ENERGY. SMART.

34

## Knowledge about Energy Efficiency

*Customers are knowledgeable about energy conservation actions.*

The majority of customers are aware of the actions that can be taken to be more energy efficient, and the environmental impact of using their home appliances and equipment. Additionally, seven in ten or more customers by segment know *at least a little* about the specific programs and services that Duquesne Light offers to help customers save energy.



Q17-Q19: How knowledgeable do you feel you are about each of the following? Letters indicate significant differences between groups at the 95% confidence interval.

MARKET STRATEGIES INTERNATIONAL

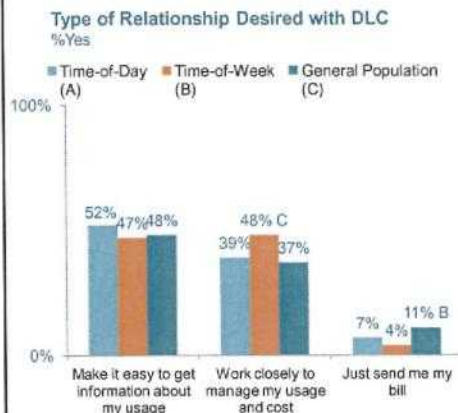
Smart Sense  
SAVE ENERGY. SMART!

35

## Desired Relationship with Duquesne Light

*Most customers want more interaction about energy usage and costs.*

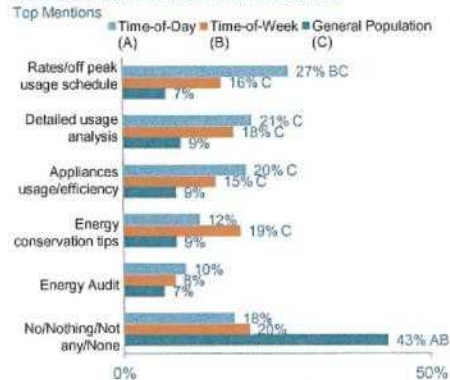
Time-of-Use rates, detailed usage analysis, and energy conservation tips are among the top mentions of information and services that customers would like to be able to access.



Q30: Which of the following statements best describes the type of relationship you would like to have with Duquesne Light as a residential customer? (Select one.) Letters indicate significant differences between groups at the 95% confidence interval.

MARKET STRATEGIES INTERNATIONAL

### How DLC can Partner with Household



Q20E: Thinking about how Duquesne Light could work with your household to help manage its energy use and costs, what specific types of information or services could Duquesne Light provide?

Smart Sense  
SAVE ENERGY. SMART!

36

## Smart Sense Program Enrollment Materials

MARKET STRATEGIES  
THE SMART SOURCE
Smart Sense  
SAVE ENERGY. SMART!
37

### Primary Reason for Smart Sense Program Enrollment

*Understanding energy usage and saving money are key factors related to customer enrollment in Smart Sense.*

The participation incentive was also considered a reason that some customers enrolled in the program, and a small proportion of customers specifically indicate they would not have enrolled in Smart Sense if an incentive had not been offered.

#### Primary Reason Enrolled in Smart Sense Program

Top Mentions

Reason	Time-of-Day (A)	Time-of-Week (B)
Become more aware of energy usage	19%	32% B
Save money	18%	28%
\$120 incentive	12%	20%
Ability to control energy usage	11%	7%
Ability to monitor costs regularly	9%	5%
Save energy/energy efficiency	7%	15% A
Ability to view hourly usage	6%	3%

#### Smart Sense Enrollment without Incentive

##### Time-of-Day

Yes	58%
Don't Know	33%
No	9%

##### Time-of-Week

Yes	51%
Don't Know	31%
No	18%

Q21. Now, thinking specifically about the Smart Sense program you are enrolled in, what would you say is the primary reason that you decided to sign up for the program? (Select one.)  
Q32. If an incentive had not been offered, would you still have enrolled in the Smart Sense program?  
Letters indicate significant differences between groups at the 95% confidence interval.

MARKET STRATEGIES  
THE SMART SOURCE
Smart Sense  
SAVE ENERGY. SMART!
38



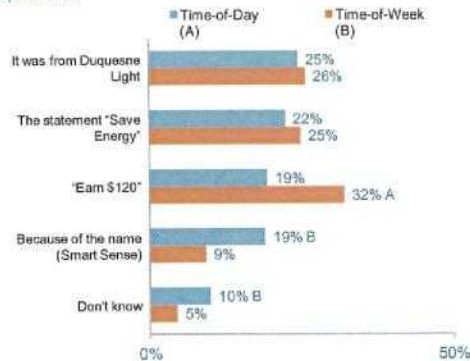
## Smart Sense Materials – Envelope

Motivations for opening the recruitment envelope vary somewhat by Smart Sense group.

In particular, significantly more Time-of-Day customers cite the *Smart Sense* brand name as their motivation for opening the program enrollment envelope, while significantly more Time-of-Week customers were motivated by the incentive statement.

### Primary Reason Opened Envelope

Top Mentions



Q33. What is the primary reason you decided to open the envelope? (Select one.) Letters indicate significant differences between groups at the 95% confidence interval.

MARKET STRATEGIES INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART.

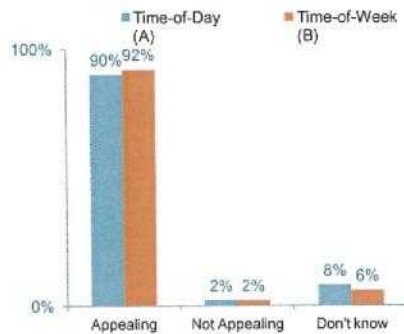
39

## Smart Sense Materials – Invitation Letter

Invitation letter was appealing and most reviewed it completely.

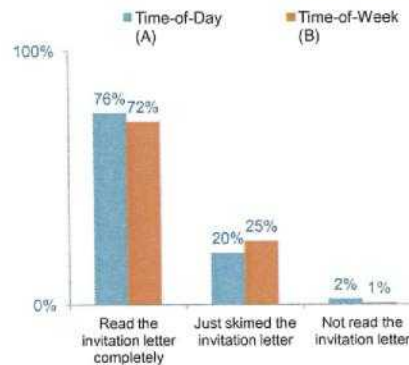
### Appeal of Invitation Letter

Appealing vs. Not Appealing



### Attention to Invitation Letter

%Yes



Q34. Next, taking a look at the invitation letter you received, would you say it was...  
Q35. When you received the invitation letter, did you... (Select one.)

MARKET STRATEGIES INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART.

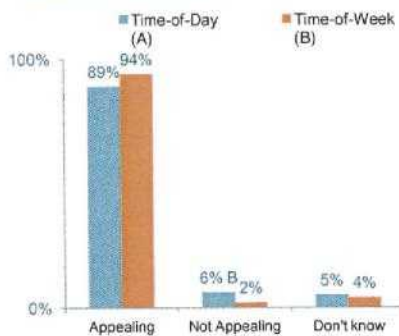
40

## Smart Sense Materials – Program Brochure

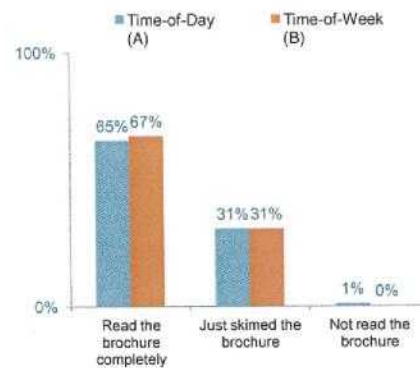
The program brochure was appealing, and two-thirds reviewed the document completely.



**Appeal of Brochure**  
Appealing vs. Not Appealing



**Attention to Brochure**  
%Yes



Q36: Now, taking a look at the program brochure you received, would you say it was:  
Q37: When you received the program brochure, did you: (Select one.)  
Letters indicate significant differences between groups at the 95% confidence interval.

MARKETSTRATEGIES  
INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART.

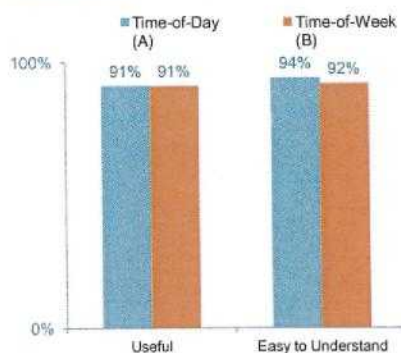
41

## Smart Sense Materials – Overall Evaluation and Feedback

Most participants found the information useful and easy to understand.

The vast majority of customers had no specific feedback about the Smart Sense program materials they received. Among those that provided feedback, most of the commentary is considered positive.

**Evaluation of Program Information**  
Percent Positive



**Feedback about Smart Sense Materials**  
Top Mentions



Q38: Overall, how useful was the information in the materials provided about the Smart Sense program?  
Q39: How easy to understand was the information in the materials provided about the Smart Sense program?  
Q39OE: Do you have any specific feedback about the materials you received about the Smart Sense program?  
Letters indicate significant differences between groups at the 95% confidence interval.

MARKETSTRATEGIES  
INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART.

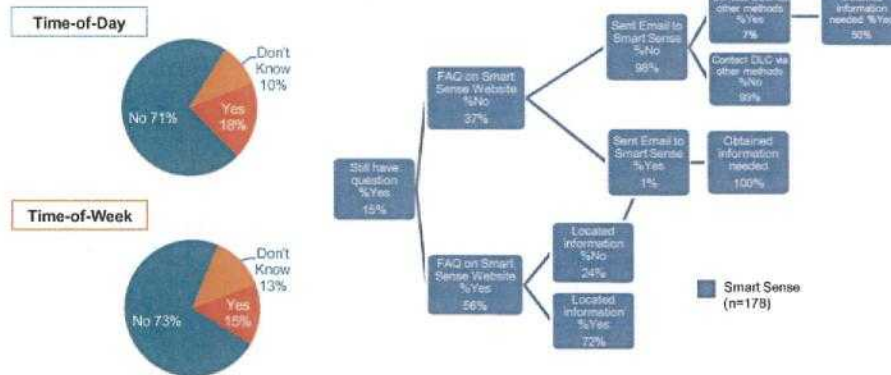
42

## Smart Sense Materials – Follow-up Question Resolution

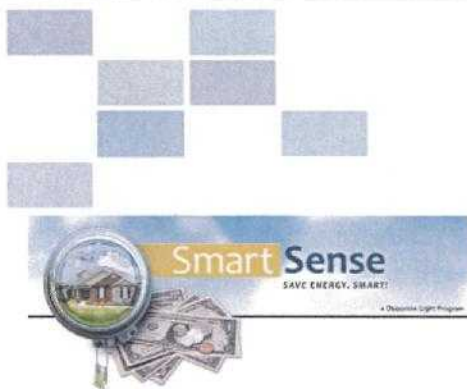
*Very few participants had questions after reviewing the program materials.*

Among those that still had questions after reviewing the materials, more than half used the FAQ's to answer their questions, with most being able to locate the necessary information. Participants that used others means to address their questions were generally successful in locating the necessary information.

### Questions After Reviewing Materials



Q40-Q46A



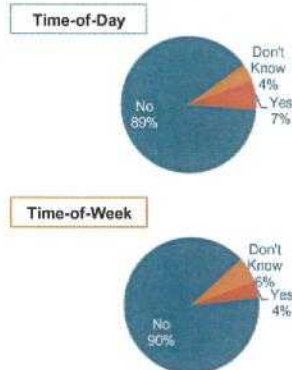
## Program Website and Smart Sense Team Interactions

## Smart Sense Website

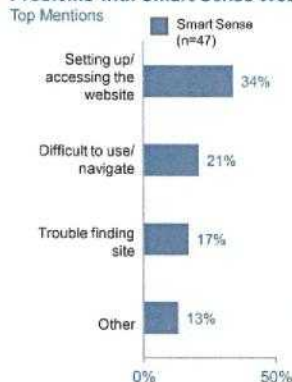
Very few customers report problems accessing the website.

The primary issues reported by customers that had problems included setting up, accessing, or locating the website, as well as general usage and navigation problems.

### Trouble Accessing Website



### Problems with Smart Sense Website



"Smart Sense site looked very similar to the current billing access site. At first I was not sure that I was on the "Smart Sense" site. And I expected the information to be more detailed than a bar graph. Would have been nice to see how my usage compares to national averages for similar type households."

"Could not find it, I have yet to log into it."

"I didn't find it quickly from the home page. I called an agent to help me maneuver through the links."

Q47 Did you have any problems accessing or using the Smart Sense website?

Q47CE Please provide additional information on the problems you had accessing or using the Smart Sense website.

MARKETSTRATEGIES INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART!

45

## Smart Sense Team Interactions

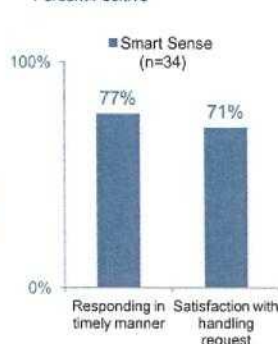
Very few customers have interacted with the Smart Sense team.

Of the small proportion that have had contact, most feel positive about the customer service provided by the team.

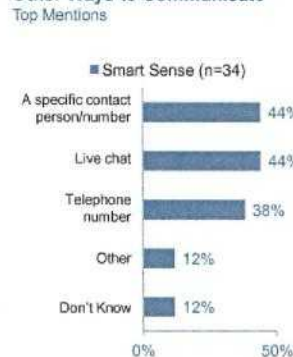
### Contact with Smart Sense Team



### Evaluation of Team



### Other Ways to Communicate



Q48 D48A Q50 Q51 Q52

MARKETSTRATEGIES INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART!

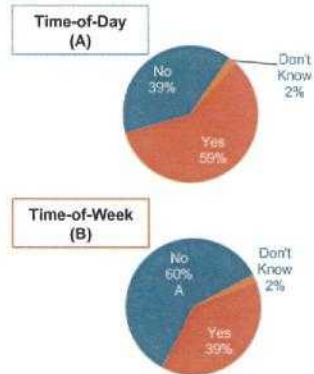
46

## Energy Usage Information

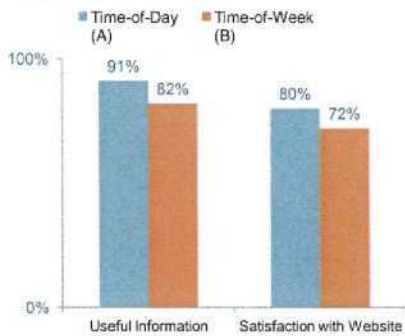
*More Time-of-Day customers have accessed the energy usage information on the website than Time-of-Week customers.*

Among customers that viewed the energy usage information, the vast majority feel the information is useful. In addition, the majority of participants feel positive about the program's website overall.

### Viewed Home's Energy Use on Website



### Evaluation of Home Energy Use Information and Smart Sense Website

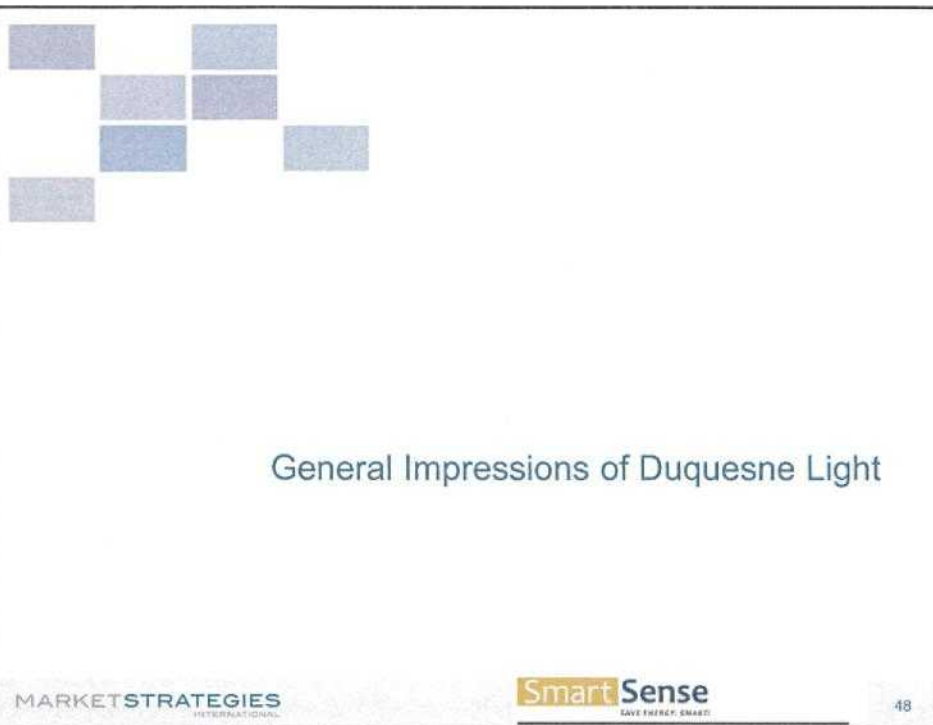


Q93-Q95

MARKETSTRATEGIES  
INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART.

47



MARKETSTRATEGIES  
INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART.

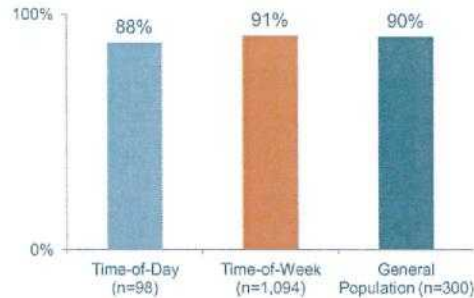
48

## Overall Satisfaction with Duquesne Light

*Customer satisfaction is nearly universal for all segments.*

Importantly, the strong level of satisfaction among customers in the Web survey is nearly identical to the satisfaction levels measured in the ongoing satisfaction survey conducted via telephone.

**Overall Satisfaction**  
Positive Response



**YTD Comparison to Residential Tracker**  
91%

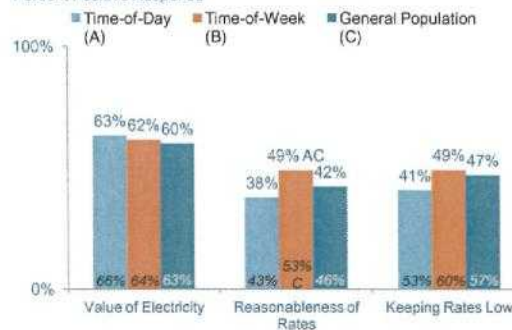
Q1. To begin, thinking about the overall level of service provided by your electric company, Duquesne Light, how satisfied would you say you are with Duquesne Light as a residential customer?

## Perception of Electricity Value and Rates

*The positive response levels differ from the telephone research.*

While overall customer satisfaction is similar between the Web and telephone survey, the total positive response levels on these rate and price perception measures vary from the telephone results. This is due in part to higher "neutral" and "don't know" responses.

**Perceptions of Electricity Value and Rates**  
Percent Positive Response



**YTD Comparison to Residential Tracker**

Value of Electricity	Reasonableness of Rates	Keeping Rates Low
81%	56%	64%

Q2. Thinking about the value of the products and services you receive from Duquesne Light, in terms of the actual product they deliver, that is - electricity, how would you rate Duquesne Light on the value you receive for the price you pay for electricity?

Q3. In general, how would you describe Duquesne Light's electric rates?

Q4. How would you rate Duquesne Light on keeping rates as low as possible?

Letters indicate significant differences between groups at the 95% confidence interval. Asterisks indicate Don't Know responses removed from the bottom of each bar.

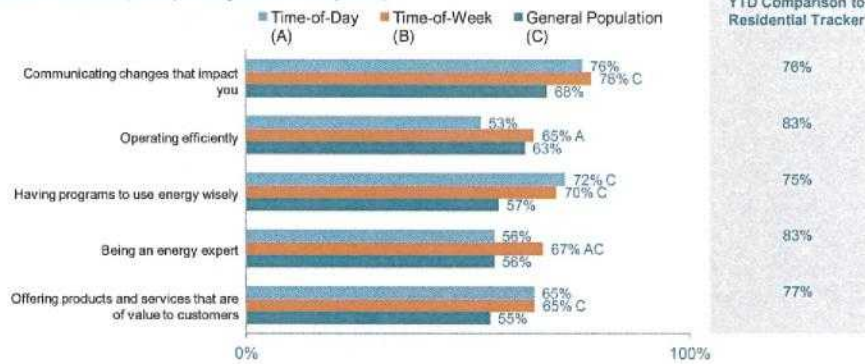
## Energy Efficiency, Communications, and Programs

*The positive response levels differ from the telephone research.*

Regardless, customers in the Time-of-Week program tend to report higher total positive response related to Duquesne Light's performance on these measures than General Residential customers.

### Energy Efficiency, Communications, and Programs

Percent Positive Response (including Don't know responses)



Q5-09: Now, turning to some other activities related to the service you receive from Duquesne Light, how would you rate Duquesne Light on... Letters indicate significant differences between groups at the 95% confidence interval.

MARKETSTRATEGIES INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART!

51

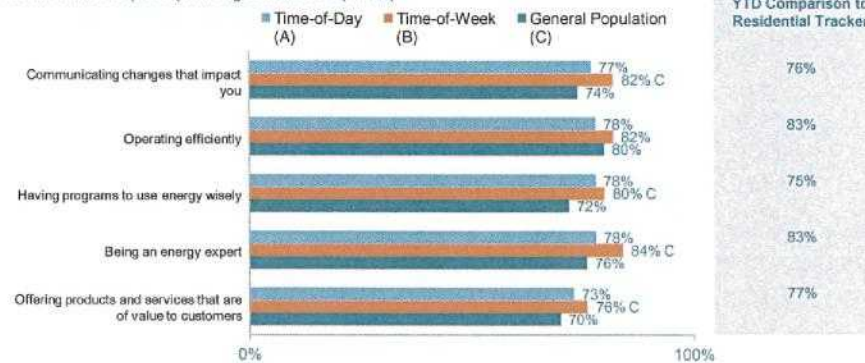
## Energy Efficiency, Communications, and Programs

*Removing Don't know responses brings web data closer to telephone data.*

Customers in the Time-of-Week program tend to report higher total positive response related to Duquesne Light's performance on these measures than General Residential customers.

### Energy Efficiency, Communications, and Programs

Percent Positive Response (excluding Don't know responses)



Q5-20: Now, turning to some other activities related to the service you receive from Duquesne Light, how would you rate Duquesne Light on... Letters indicate significant differences between groups at the 95% confidence interval.

MARKETSTRATEGIES INTERNATIONAL

Smart Sense  
SAVE ENERGY. SMART!

52



## Survey Demographics

## Survey Demographic Profile

	Time-of-Day (n=98) (A)	Time-of-Week (n=1,094) (B)	General Population (n=300) (C)		Time-of-Day (n=98) (A)	Time-of-Week (n=1,094) (B)	General Population (n=300) (C)
<b>Age</b>				<b>Income</b>			
19-35	27%	25%	32% B	Less than \$50K	9%	18% A	30% A,B
36-45	24%	26% C	19%	\$50-\$100K	38%	47% C	38%
46-55	26%	26%	21%	\$100K-\$200K	40% BC	29% C	14%
56-65	15%	16%	22% B	Over \$200K	13% BC	6% C	2%
Over 65	9%	7%	9%	Refused	-	-	16%
<b>Gender</b>				<b>Own Home</b>			
Male	63% BC	46%	50%	Own	100% C	100% C	74%
Female	37%	55% A	50% A	<b>Education</b>			
<b>Race</b>				High school	6%	6%	9%
White	94% C	94% C	84%	Technical School/ Some College	16%	20%	23%
Black / African American	2%	3%	6% B	College	43%	41%	36%
Native American	2% B	0%	0%	Graduate	34%	30%	25%
Asian	-	1%	2%	Other	1%	1%	1%
Hispanic	1%	0%	0%	Refused	-	-	4%
Other	1%	1%	1%				
Refused	-	-	5%				

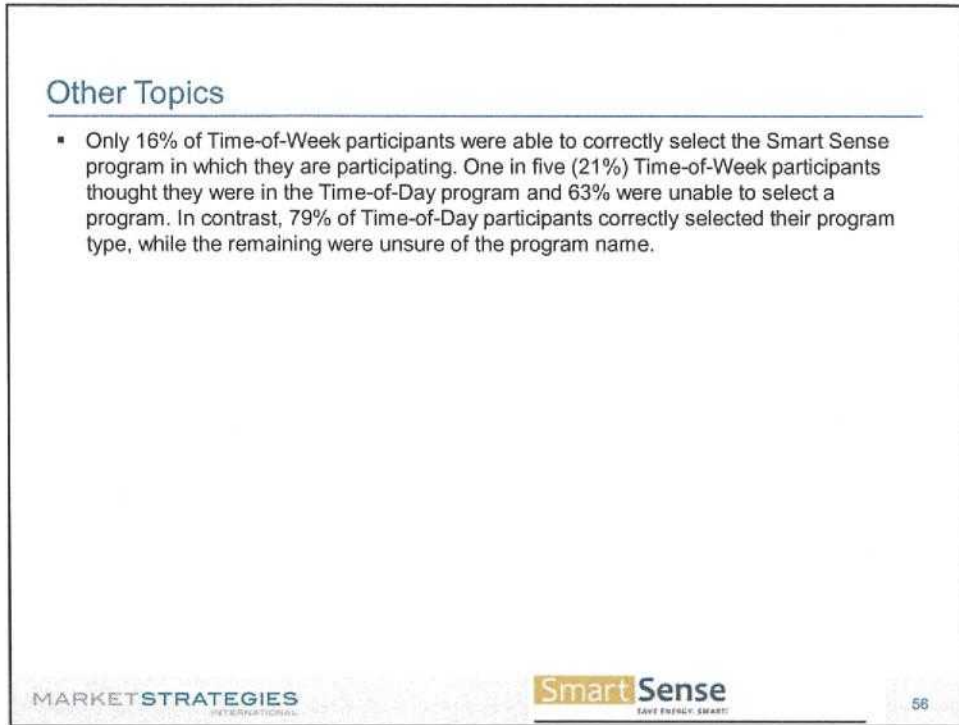
Letters indicate significant differences between groups at the 95% confidence interval.





### Other Topics

- Only 16% of Time-of-Week participants were able to correctly select the Smart Sense program in which they are participating. One in five (21%) Time-of-Week participants thought they were in the Time-of-Day program and 63% were unable to select a program. In contrast, 79% of Time-of-Day participants correctly selected their program type, while the remaining were unsure of the program name.





---

## Attachment 13

MARKETSTRATEGIES  
INTERNATIONAL

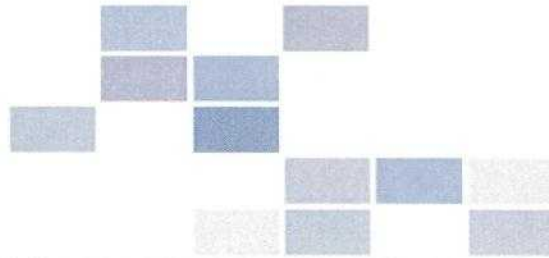
---

Time-of-Use Pricing Customer Focus Groups

MARKETSTRATEGIES  
INTERNATIONAL

2011 Duquesne Light  
Time-of-Use Pricing Customer Focus Groups  
Smart Sense Participants and General Customers  
Final Report

October 20, 2011



MARKETSTRATEGIES  
INTERNATIONAL

## Report Contents

---

Research Objectives	3
Research Methodology	4
Key Findings	6
Research Implications	11
General Awareness of DLC/Programs and Services Discussion	13
Smart Meter/Time-of-Use Awareness	16
Dynamic Pricing Discussion	20
Time-of-Use Pricing Discussion	26
Other Topics	54
Appendices	58

MARKETSTRATEGIES  
INTERNATIONAL

2

## Research Objectives

The specific objectives for Duquesne Light's Time-of-Use in-depth focus group research:

- To explore general customer perceptions and opinions about Duquesne Light (DLC) and its programs and services.
- To determine participants' current awareness of dynamic (time-of-use or TOU) pricing and smart meters.
- To provide basic information about dynamic pricing and then understand positive and negative customer reactions to the general concept and drivers of fear/uncertainty/doubt.
- To understand what benefits and features of a TOU pricing program would be of greatest/least interest to customers: alternative time/price structures, systems for providing usage and price information, billing plans, etc.
- To probe communication preferences relating to TOU programs.
- To provide information about peak time rebates and then discuss what benefits and features of a PTR program would be of greatest/least interest to customers and identify roadblocks and drivers of fear/uncertainty/doubt.

## Research Methodology

- Market Strategies conducted a total of four focus groups with Duquesne Light customers on October 4<sup>th</sup> and 5<sup>th</sup>, 2011.

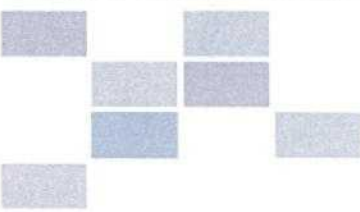
Location	Date	Time	Customer Type
Campos Research, Pittsburgh, Pennsylvania	October 4, 2011	5:30pm	Smart Sense Time-of-Week customers
		8:00pm	General Residential customers
	October 5, 2011	5:30pm	Smart Sense Time-of-Day customers
		8:00pm	Smart Sense Time-of-Week customers

- All groups were moderated by Market Strategies International Vice President, Jack Lloyd.
- The three Smart Sense groups each had 10 participants. The General Residential group had 8 participants.
- All participants received a \$75 incentive payment.
- The groups averaged approximately two hours in length.
- The groups were audio and video taped and typed transcripts of each group were developed.

## Research Methodology (cont.)

Smart Sense General Residential Duquesne Light customers who participated in the focus groups had the following specific characteristics:

	Specific Participant Characteristics
<b>Group 1</b> <b>Time-of-Week</b> October 4 <sup>th</sup> ; 5:30 (10 participants)	<ul style="list-style-type: none"> <li>- Mix of ages (majority between 38-84 years old)</li> <li>- Income levels varied (half falling between \$50K-\$100K category)</li> <li>- Almost all participants had a college degree or higher</li> <li>- All participants in this group were Caucasian, owned their home, indicated that they monitor their electricity usage closely, and are currently taking steps to conserve energy</li> </ul>
<b>Group 2</b> <b>General Residential</b> October 4 <sup>th</sup> ; 8:00 (8 participants)	<ul style="list-style-type: none"> <li>- Mix of ages (majority falling between 38-55 years old)</li> <li>- Income levels varied (half falling between \$50K-\$100K)</li> <li>- Almost all participants had a college degree or higher</li> <li>- Seven of the participants in this group were Caucasian, the other was African-American</li> <li>- Six of the participants owned their home, two renters</li> <li>- All participants indicated that they monitor their electricity usage closely, and are currently taking steps to conserve energy</li> </ul>
<b>Group 3</b> <b>Time-of-Day</b> October 5 <sup>th</sup> ; 5:30 (10 participants)	<ul style="list-style-type: none"> <li>- Mix of ages (majority falling between 36-45 years old)</li> <li>- More than half had incomes of \$75K and above</li> <li>- Almost all participants had a college degree or higher</li> <li>- All participants in this group were Caucasian, owned their home, and are currently taking steps to conserve energy</li> <li>- Most participants indicated they monitor their electric use closely</li> </ul>
<b>Group 4</b> <b>Time-of-Week</b> October 5 <sup>th</sup> ; 8:00 (10 participants)	<ul style="list-style-type: none"> <li>- Age of the participants fell between 36-64 years old</li> <li>- More than half had incomes of \$75K and above</li> <li>- Education was mixed (participants primarily having a college degree or higher)</li> <li>- Eight of the participants were Caucasian, with one Hispanic and one African-American</li> <li>- All participants in this group owned their home, are currently taking steps to conserve energy, and indicate they monitor their electric use closely</li> </ul>



## Key Findings

MARKETSTRATEGIES  
INTERNATIONAL

6

## Key Findings

---

### Media Awareness of Duquesne Light

- Customers described hearing/seeing information on competitor's energy supply abilities; however, most indicated that figuring out the actual price for switching was complicated to research and chose to stay with Duquesne.

### Awareness of Programs and Services

- When asked about services or programs, unaided responses consisted of the refrigerator rebate program, Dollar Energy Fund, CAP for energy assistance, Service Line newsletter. Only one person mentioned WATT CHOICES, but when specifically asked if they knew of WATT CHOICES, many participants indicated that they heard of the program, but did not recall the details of the program.
- Customers had a positive reaction to Duquesne Light providing services and programs to customers. Reasons cited include helping the community, being environmentally conscious, and helping customers save money and energy.

## Key Findings (cont.)

---

### Smart Meters and Time of Use Pricing

- Knowledge of the term "Smart Meter" is highest among the Time-of-Day participants, with Time-of-Use participants close behind. In contrast, many General Population customers indicate not having heard the term prior to the focus group.
- Similar to knowledge of smart meters, the General Population has the least amount of awareness about Time-of-Use pricing. All participants in the Time-of-Day group indicate being aware of Time-of-Use, as well as nearly all of the Time-of-Week participants.

## Key Findings (cont.)

---

### Dynamic Pricing

- Customers in each group received a brief explanation of Time-of-Use pricing, which included graphic displays to assist with the concept of the hypothetical pricing structure.
  - Overall, customers felt positive to neutral about the general concept and some liked the idea of being able to shift behaviors to save money.
  - Some Time-of-Day customers indicated that there would be too much thinking involved about what time they may be charged more for certain tasks, such as washing clothes.
  - Most customers liked the idea of being able to save energy, and how this can help the environment; however, they also indicated that more research and education would be needed to fully embrace the new concept.

## Key Findings (cont.)

---

### Dynamic Pricing Program Preferences

Four specific hypothetical dynamic pricing programs were tested:

- **A relatively simple Energy Reduction Rebate had the highest positive rating overall among the four plans in each of the four groups.**
  - Participants felt that they could save money by doing things they already do – such as turning off lights when not in use.
  - Some participants were skeptical about the 'baseline' period. Continued rebates would be difficult to achieve after two or more years.

In a separate discussion, participants reacted very favorably to a Peak Time Rebate Plan:

- All groups rated this program "Positive," or "Very Positive"
  - Participants felt this was the easiest to follow, and to put into practice
  - Most participants liked the added bonus of "doing the right thing to help out," and helping out the environment
  - Many liked the idea that they would not be penalized if they did not change their behavior





## Research Implications

MARKETSTRATEGIES  
INTERNATIONAL

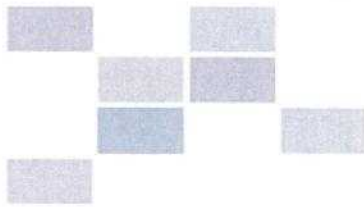
11

## Research Implications

- Customers prefer simplicity and ease of participation; they are less enthusiastic about programs that involve paying a lot of attention to the details of their energy usage and making lifestyle changes.
- While customers like the potential for significant savings, they strongly dislike the risk of higher bills. Therefore, they are reluctant to get involved in programs with high on-peak pricing, even when very low off-peak rates are part of the package.
- For a program that is easy to participate in and makes economic sense to customers, the feeling of "doing the right thing" can be an added motivator leading to high interest – see the comments about Peak Time Rebates.
- These qualitative findings fully align with, and help to explain, recent survey results and discrete choice analysis.

MARKETSTRATEGIES  
INTERNATIONAL

12



## Detailed Findings with Customer Comments General Awareness of Duquesne Light and Programs and Services Discussion

### General Awareness of Duquesne Light

#### Comments from Discussion

*"I've heard of service provided through another provider, but it's still supplied from Duquesne Light." (Group 2 General Public, 8:00pm)*

*"IGS will supply through Duquesne Light if you switch, lock in your rate for two years." (Group 2 General Public, 8:00pm)*

*"It was so confusing, I couldn't decide. I didn't want to make the decision because there were five different companies. Which one do I pick? They had all these different things, I'll just stay the same, keep paying whatever." (Group 2 General Public, 8:00pm)*

*"I keep getting phone calls about Duquesne Light no longer generates power, so they do have different suppliers, and now we need to pick one. It's very confusing, and I do understand that Duquesne no longer generates electricity themselves, is what they're saying on the phone, and have a whole pool of suppliers." (Group 3 Time-of-Day, 5:30pm)*

*"I guess Duquesne Light came out with the Smart Meter. I read about some on CNN online, just sort of explaining the thought behind using the Smart Meters and trying to get you time of day rates that could potentially save you money. I read that within the last three months." (Group 3 Time-of-Day, 5:30pm)*

*"There are the pamphlets and stuff we get from the competing companies. I got one today that told me that it's 99-cents or a dollar for kilowatt cheaper from the other company." (Group 4 Time-of-Week, 8:00pm)*

*"There are a lot of programs out there and I read through these and I look at what you have to do, and I don't have time to do that. It's not easy, I'm not going to do it. It might save me a couple of dollars here or there, but in the long run, my time is much more important than those dollars." (Group 4 Time-of-Week, 8:00pm)*

#### Key Findings

- Customers described hearing/seeing information on competitor's energy supply abilities; however, most indicated that figuring out the actual price for switching was complicated to research and chose to stay with Duquesne.

## Awareness of Programs and Services

### Comments from Discussion

*"It's the Dollar Energy Fund. If your bill is a hundred dollars, you send in \$101.00, the computer takes that extra dollar and put in to help poor people. Also, Duquesne Light does send a little full colored brochure with your bill. Usually I do read it, just to see what's going on."* (Group 2 General Public, 8:00pm)

*"The CAP program. It's for low income. I am on maternity leave and I am not getting an income, I looked into it, but my husband makes too much. They have where if you need help you can get it for a couple of months, or I am assuming the whole year, if you need it, but they do help out with that."* (Group 2 General Public, 8:00pm)

*"They'll give you a rebate if you have an old refrigerator or freezer in the basement you're really not using, they'll buy it off you for \$35. They'll pick it up and get rid of it and everything."* (Group 2 General Public, 8:00pm)

*"There is a program for people who need assistance with their electricity to help pay their bills."* (Group 3 Time-of-Day, 5:30pm)

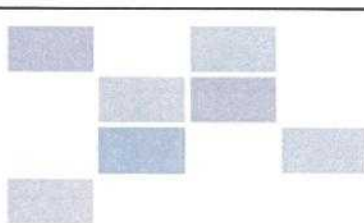
*"I think they actually have a program where they will send somebody out and kind of evaluate your energy usage and make recommendations as to what you can do to conserve energy as well."* (Group 3 Time-of-Day, 5:30pm)

*"I think in the monthly bills there is a flyer that they send with some tips in there for energy saving tips."* (Group 4 Time-of-Week, 8:00pm)

*"I went on the website and took that energy app and I think that is actually a simpler thing than the Watt Choices. It's a nice thing. You get some stuff from Duquesne. You get light bulbs, night lights, and a surge protector."* (Group 4 Time-of-Week, 8:00pm)

### Key Findings

- Unaided knowledge consisted of the refrigerator rebate program, Dollar Energy Fund, CAP for energy assistance, and the Service Line newsletter.
- Only one person mentioned WATT CHOICES
- When asked, many indicated they have heard of WATT CHOICES, but did not recall the details of the program.
- Customers had a positive reaction to Duquesne Light providing services and programs to customers. Reasons cited include helping the community, being environmentally conscious, and helping customers save money and energy.



## Detailed Findings with Customer Comments Smart Meter and Time-of-Use Awareness

## Smart Meter and Time-of-Use Awareness

### Key Findings

- Knowledge of the term "Smart Meter" is highest among the Time-of-Day participants, with Time-of-Use participants close behind. In contrast, many General Population customers indicate not having heard the term prior to the focus group.
- Similar to knowledge of smart meters, the General Population has the least amount of awareness of Time-of-Use pricing. All participants in the Time-of-Day group indicate being aware of Time-of-Use, as well as nearly all of the Time-of-Week participants.

Smart Meter	Total	Grp #1 TOW	Grp #2 General	Grp #3 TOD	Grp #4 TOW
<b>Unaided awareness of Smart Meter</b>					
Yes	61%	70%	25%	90%	60%
No	26	10	75	0	20
Don't Know/Not Sure	10	20	0	10	10
Missing	3	0	0	0	10
<b>Time-of-Use Pricing</b>					
<b>Unaided awareness of Time-of-Use Pricing</b>					
Yes	83%	90%	50%	100%	90%
No	15	10	50	0	0
Don't Know/Not Sure	0	0	0	0	0
Missing	2	0	0	0	10

## Smart Meter and Time-of-Use Awareness

### Comments

#### SMART METER

"As far as the Smart part of it is, I don't think I understand more than the fact that it measures how much and when." (Group 1 Time-of-Week, 5:30pm)

"Eventually you can go on the web, and you could see how your electrical usage would be by time of day, day of week or ultimately even by appliance with all these refrigerator and freezers we have." (Group 1 Time-of-Week, 5:30pm)

"I think that they probably will know what your energy usage is and they won't need a meter reader. That might be helpful because we could track your usage and it could tell you if you're using a lot of energy at this time, maybe there's something you could turn off or change." (Group 2 General Public, 8:00pm)

"Smart Meters will allow the utility to keep track of the customer's usage based on the time of day, i.e., normal business hours, say eight a.m. to five p.m., evening five p.m. to ten p.m., etc. This will enable the utility to have different rates corresponding to the time period that the commodity is used." (Group 2 General Public, 8:00pm)

"They [Smart Meters] would malfunction and then you'd get....your bill on these Smart Meters and they malfunction, get a bad bill and it would take some time to remedy that and then how would you pinpoint that? I could see my husband monkeying with it, and then what?" (Group 2 General Public, 8:00pm)

"Electricity is one of those things that because we don't see it...we don't see how much we're using on a constant basis. Every month you get a bill and you don't really understand how much you're using every day. The type of thing [Smart Meters] have that as soon as we know how much we're using every day and we're much more conscious about how we're using it, it will mean that we'll all save, energy, we'll be saving money, but also our impact on the environment, I think, will be very positive, too...to be much more aware about how much we're doing at particular time as opposed to just once a month." (Group 2 General Public, 8:00pm)

"It lets you see your current energy usage and you can track your energy use throughout the day, or the week, or over a period of time. And you can get a better sense of when you're using your energy and if you can lower the cost of it at that time, you can put all the pieces together." (Group 3 Time-of-Day, 5:30pm)

"Big Brother could be watching your electricity usage with the Smart Meter. It's constantly transmitting to the electric company." (Group 3 Time-of-Day, 5:30pm)

## Smart Meter and Time-of-Use Awareness

### Comments

#### TIME-OF-USE

*"I think it's a real hard sell to the general public. I think most people don't care. They're not going to run around and unplug all their appliances because they can't see the savings right away. Now if there was a meter on every appliance and it said you unplug me now you just saved a nickel, a dime, a quarter and five dollars, ten dollars, then maybe people would do it. But general public just won't do it, in my opinion."* (Group 1 Time-of-Week, 5:30pm)

*"The main thing is in order to sort of account for that convenience issue you would have to see that there would be some measurable savings."* (Group 1 Time-of-Week, 5:30pm)

*"Forget about the dollar amount, you have to talk about percentages, what percent am I going to save if I run my dishwasher at twelve o'clock at night, do my laundry at three o'clock in the morning."* (Group 1 Time-of-Week, 5:30pm)

*"I would be willing to do some things at different times if I did see the savings, but if it was going to be a huge inconvenience, then, no."* (Group 1 Time-of-Week, 5:30pm)

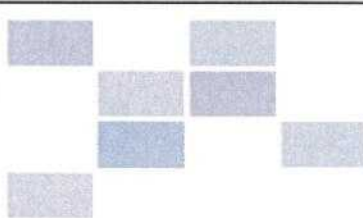
*"I was concerned with the rate increase on those peak hours. I work from home two to three days a week and my wife has a home business and she works from home every day. So, you know, there are some days that we may be working 18 hours. So peak times could be not a benefit to me."* (Group 2 General Public, 8:00pm)

*"The only big concern I have is what will the utility do to the 'peak' time usage, because that is when everyone wants to use it...are they going to take this into consideration and say, hmm, 85 percent of our usage is between the hours of eight a.m. and five p.m. Those rates are going up and the CEO is getting one heck of a bonus this year."* (Group 2 General Public, 8:00pm)

*"It would overall decrease the amount of energy production needed, because they're already producing the energy for the known peak times and there's a lot of waste. Spreading out that usage, they're not going to have to provide x-amount of usage during the peak time. They could produce y-amount of usage and even it out."* (Group 3 Time-of-Day, 5:30pm)

*"I never really heard of it to be honest with you. I already thought that there were off peak. I already thought that that was going on."* (Group 4 Time-of-Week, 8:00pm)

*"One of my concerns is a fairness issue to people who don't have the luxury of changing their time of day of doing certain things [due] to job hours, or other time constraints."* (Group 4 Time-of-Week, 8:00pm)



## Detailed Findings with Customer Comments Dynamic Pricing Discussion

## Dynamic Pricing

Customers in each group received a brief explanation of Time-of-Use pricing, which included graphic displays to assist with the concept of the hypothetical pricing structure.

### Key Findings

- Overall, customers felt positive to neutral about the general concept and some liked the idea of being able to shift behaviors to save money.
- Some Time-of-Day customers indicated that there would be too much thinking involved about what time they may be charged more for certain tasks, such as washing clothes.
- Most customers liked the idea of being able to save energy, and how this can help the environment; however, they also indicated that more research and education would be needed to fully embrace the new concept.

	Total	Grp #1 TOW	Grp #2 General	Grp #3 TOD	Grp #4 TOW
<b>Reaction to General Time-of-Use Pricing</b>					
Total Positive	50%	40%	50%	60%	50%
Very positive	8	10	12	0	10
Somewhat positive	42	30	38	60	40
Neutral	36	40	25	40	40
Total Negative	14	20	25	0	10
<b>Time-of-Use Could Benefit Me</b>					
Yes	55%	50%	50%	60%	60%
No	9	0	25	0	10
Neutral/Don't Know	36	50	25	40	30

## Dynamic Pricing

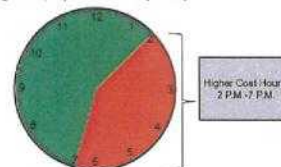
### Explanation and Examples

#### What Is "Time-of-Use Pricing?"

- Today, nearly all residential electricity customers pay the same fixed rate for electricity no matter when they use it during the day or night. This "flat rate" ignores the fact that, like most things, electricity actually costs more when the demand for it is higher, such as on hot summer afternoons, when many people are using air conditioning.
- With Smart Meters in place, utilities are able to offer customers a new pricing option called Time-of-Use pricing. During most of the day, customers on this new rate plan would pay less for electricity than flat-rate customers do; but at times of high demand, Time-of-Use customers would pay more.
- Customers could take advantage of the Time-of-Use rate to save money by changing the timing of their electricity usage – for example, by running clothes dryers and dishwashers in the evening or on weekends, or by using programmable thermostats to set their air conditioner a couple of degrees higher in the afternoon.

#### What Is "Time-of-Use Pricing?"

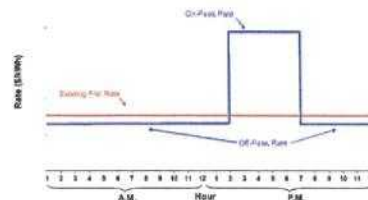
EXAMPLE  
Higher-cost, on-peak hours Monday - Friday



Lower-cost, off-peak hours include weekends, designated holidays and all weekday off-peak hours indicated in the clock above.

#### What Is "Time-of-Use Pricing?"

This illustrative time-of-use rate example consists of a higher price during the peak period and a discounted price during the remaining hours.



## Reaction to Dynamic Pricing

### Comments

#### POSITIVE

*"I like anything that will save money. I think most people want to save money and, I think it's a very easy thing to adjust your schedules. You've got this weekend. Most people don't work on the weekend, you can do an awful lot of things on the weekend that are off-peak."* (Group 1 Time-of-Week, 5:30pm)

*"I used to do the 'time of use' pricing in Florida, and I used to try and run everything I could in the evenings. It seemed to work very well."* (Group 2 General Public, 8:00pm)

*"I feel that you would save money in the end. I am not really home during the high demand times, so I think it would benefit me."* (Group 2 General Public, 8:00pm)

*"I used to do this in the past, so I don't worry as much as I used to about turning everything. I try to, but I know in the past when I knew that it made a difference and I was benefiting from it, I would make more of a conscious effort to turn everything off, unplug everything, so that my bill would be lower."* (Group 2 General Public, 8:00pm)

*"I just believe that it could allow for people to only pay for electricity for using it. I mean instead of paying an average rate that everybody pays, this is our cost at this time, and we'll average those out and everybody pays that rate, you can save money perhaps."* (Group 3 Time-of-Day, 5:30pm)

## Reaction to Dynamic Pricing

### Comments (cont.)

#### NEUTRAL

*"I do think there's an opportunity to save on energy costs. When it asked if this is something that could benefit me, I said neutral, because I would really have to do an analysis of my current usage and see how much I could control and how much I couldn't."* (Group 1 Time-of-Week, 5:30pm)

*"I think it's going to suit some people, but not everybody."* (Group 1 Time-of-Week, 5:30pm)

*"I put down I was neutral at this point. Since I am retired I am at the house all day, unless I am going somewhere. We normally run the dishwasher right before we go to bed, just for the fact you're accumulating dishes and plates and it's pretty full by that time, so we run it and in the morning I put everything away. But occasionally we might forget it or it might be full enough to run, so the next day I'll find a bunch of stuff the kid left downstairs, bring that up, load the dishwasher and run it during peak hours. I think a big thing with me is I'd like to get some dollars and cents, how much per kilowatt hour during peak versus non-peak because I'd have a better understanding at that point."* (Group 2 General Public, 8:00pm)

*"I know myself I could adjust my dishwashing and my clothes washing, which is my main electricity users, but I don't want it to be late at night. I can't be doing laundry at midnight. People who maybe work strange hours and they want to take advantage of it, but they can't because they're working during those off-peak hours, and then they're going to be on the on-peak hours, everything they use. So that might be a disadvantage to people who work like some sort of strange shift other than a nine to five."* (Group 1 Time-of-Week, 5:30pm)

*"It has the potential to save people money, but then I'd be worried about the peak raising much higher, so that if you couldn't take advantage of that, you'll end up paying more."* (Group 4 Time-of-Week, 8:00pm)

#### NEGATIVE

*"I work, my husband works, and we're not home during the day and we come home at night and have to do work. Suddenly the company would say to me, well, if you have to do work, I am now going to charge you five times when you're doing work at this peak time. I mean, people have got to use energy at a certain time of day that they have to use energy."* (Group 2 General Public, 8:00pm)

*"I was concerned with the peak hours as well, with the rate increase on those peak hours. I work from home two to three days a week and my wife has a home business and she works from home every day. There are some days that we may be working 18 hours. So peak times could not be a benefit to me."* (Group 2 General Public, 8:00pm)

## Reaction to Dynamic Pricing

### Comments (cont.)

#### NEGATIVE (cont.)

"I just feel that it would basically become when I should be doing something or not. In the winter and the kids are in school and I am working, it might benefit me, but during the summer with kids home, they're not going to be conscious of playing Xbox or doing anything. But compared to the flat rate, I'd rather just stay the flat rate and not worry about what I am doing when." (Group 2 General Public, 8:00pm)

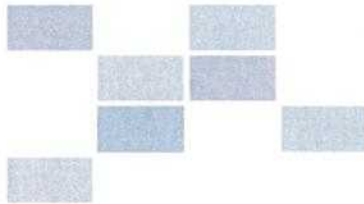
"I think it would be difficult to lower our usage during the five to seven hours, and because of that, I'm not sure how much it would benefit our bill to go with the lower rate during the day. According to the graph, that jump in price could be so much that it could outweigh the benefit of having a lower cost during the day." (Group 3 Time-of-Day, 5:30pm)

"One thing that concerns me, is the complexity of everything. And the average person just might not understand how this may benefit them or not benefit them. I think that that should be a real concern, in making sure the customer understands the differences in the plan, so maybe showing them examples of: if you use this kind of electricity, like the flat rate all day, then your bill would look like this. Or, if you just had that peak, then your bill would look at that." (Group 3 Time-of-Day, 5:30pm)

"It's almost worth paying the couple of extra bucks just not having to deal with the hassle and figuring your time. So you have the postal service flat rate box, everybody likes it because it's at a simplified rate. I mean if you shift something, how much is it going to be. It is more? It's more of a hassle. It's time consuming dealing with different variables, where if it's at a flat rate, it's very simple." (Group 3 Time-of-Day, 5:30pm)

"You really have to do some planning to get the best benefit out of it. You might have medical issues that could cause you to have to do certain things at certain times of day. It could be unfair to some consumers." (Group 4 Time-of-Week, 8:00pm)

"Two reasons. I'm thinking of myself, if everybody knows when the peak hours are and we all shift to different use time, then the peak hours change. Are they going to notify me every day, call me up, send an email and say go back two hours today, that will be a good time. And the other thing I'm concerned about, why does energy cost more during peak hours? It's like a nuclear reactor, it's pumping out juice the same amount. You know, it's like why does gasoline cost more when it's still in the ground and the price goes up." (Group 4 Time-of-Week, 8:00pm)



## Detailed Findings with Customer Comments Time-of-Use Pricing Discussion



## Time-of-Day Plan Design Concept 1

### Key Findings

- Relatively few people felt this program would fit their lifestyle, but would welcome the opportunity to save money on their electric bill.
- Some participants felt the on-peak rate was too high and were concerned about the risk of being 'penalized' if they made a mistake and had to use the electricity during these times.
- General Population customers gave this plan the lowest rating out of all four plan designs.

	Total	Grp #1 TOW	Grp #2 General	Grp #3 TOD	Grp #4 TOW
<b>Reaction to Design 1: Time-of-Day Rate Plan</b>					
Total Positive	32%	50%	0%	50%	30%
Very positive	2	10	0	0	0
Somewhat positive	30	40	0	50	30
Neutral	20	10	0	40	30
Total Negative	48	40	100	10	40
<b>Design 1: Time-of-Day Rate Plan Could Benefit Me</b>					
Yes	35%	40%	12%	50%	40%
No	28	20	50	10	30
Neutral/Don't Know	37	40	38	40	30

## Time-of-Day Plan Design Concept 1

Program Features	
On-Peak Rate:	5 times the Off-Peak rate
On-Peak Period:	2PM - 7PM Monday-Friday (25 hrs. a week)
Program Timeframe:	June through September

Assuming an average household uses about 20% of its electricity during "on-peak" hours and 80% during "off-peak" hours and assuming the average household's electric bill is \$100 per month on a flat rate, the table below shows what might happen to this household's bill under this rate plan.

	Standard Monthly Cost	Monthly Cost w/ Time-of-Day	Monthly Savings
Household shifts 5% of its total electricity use to on-peak (25% on-peak/75% off-peak)	\$100	\$111	-\$11
<b>No change</b> , the household continues to use electricity as usual (20% on-peak/80% off-peak)	\$100	\$100	\$0
Household shifts 5% of its total electricity use to off-peak (15% on-peak/85% off-peak)	\$100	\$89	\$11
Household shifts 10% of its total electricity use to off-peak (10% on-peak/90% off-peak)	\$100	\$78	\$22

## Reaction to Time-of-Day Plan

### Design Concept 1

#### Comments

##### POSITIVE

*"The thing I like about this plan, and should be firmly in place for any tiered rate structure, is there should be no penalty for not changing your habits. If you keep going like you've been going, you shouldn't be paying any more than somebody who has a flat rate. So there's an incentive to change, but there's no penalty for getting any worse."* (Group 1 Time-of-Week, 5:30pm)

*"I think it's a wonderful idea. I think it's a big incentive."* (Group 1 Time-of-Week, 5:30pm)

*"I'm not home during the day. So to me, I could just shut everything down all day long and then you know, do stuff at nights and weekends"* (Group 3 Time-of-Day, 5:30pm)

*"I'm not home two to seven. I don't get home until six, six-thirty, seven o'clock and I could probably just turn off my hot water during peak times, and I run my electricity so very little. Most of the time in the spring or fall, I don't have any air on, I don't have any heat on, I don't have anything. I have two kids who are only there part time, I could survive with very little electricity during peak hours."* (Group 3 Time-of-Day, 5:30pm)

*"I did think that if the off peak rates were much lower, then because of the increased benefit, I would benefit from the program. If I understood my usage, and I don't get home from work until seven, I know there is no reason for my air to be on, and that really saves me money. I think I could use this plan."* (Group 4 Time-of-Week, 8:00pm)

##### NEUTRAL

*"Comparing with the other savings, you're saving \$12 with the 2.5 times the peak, so you don't see too much savings here, but when you switch 5% or 10%, the \$12 twelve months, you're saving \$124 a year, and this one is only summertime, so you're only saving \$66 a year, because it's only three months to save \$32 if you could save 10%. I thought, no that's not as good, give me a whole year, I'll save more money."* (Group 4 Time-of-Week, 8:00pm)

## Reaction to Time-of-Day Plan

### Design Concept 1

#### Comments (cont.)

##### NEGATIVE

*"The very high on-peak rate. It seems like it's penalizing people who may not be able to reduce their usage that much."* (Group 1 Time-of-Week, 5:30pm)

*"I just felt that there was too big of a difference between the off-peak and the on-peak rates. I think it's limiting. I think that it's structuring us too much. I don't like my life that structured."* (Group 1 Time-of-Week, 5:30pm)

*"I think just once again because of the hours and the months of the year. It would work if we all went out of town from June. I can't see it really working for us."* (Group 2 General Public, 8:00pm)

*"I also thought that five times the peak rate seemed excessive. I also don't really have a grasp on what I currently use, to know how to compare it. During the summer months my bill probably doubles or one and a half times what it is any other time, so it already spikes. How much more than would it be according to this plan, five times more? I can't imagine. It already goes up so high during the summer months."* (Group 2 General Public, 8:00pm)

*"I don't have kids, I don't have these things, so I would probably benefit from this program more than others. If there's no opt in and opt out, there's no ability for people to take advantage of that. If there was an opt in, opt out, I think that would be pretty nice."* (Group 2 General Public, 8:00pm)

*"For the cost it would be structured, I would fall into that category where I could pay more money, because there are only so many hours in that peak time that I could actually duty change. Between two and five-thirty, I have fixed time. That's when I'm working at home and I can't change that at all. There is nothing I could change."* (Group 3 Time-of-Day, 5:30pm)

*"The only thing that is a little scary is the five times rate differential."* (Group 3 Time-of-Day, 5:30pm)

*"I only work four days a week with long hours, to cool that down for sleeping, that thing is going to run like a bandit, and I'm not going to be comfortable. You're only offering it in the summer months, I don't feel that that is going to be beneficial. Even though I understand that the peak time, you're talking about five times, the other rate, that's not good at all in my situation."* (Group 4 Time-of-Week, 8:00pm)

## Time-of-Day Plan Design Concept 2

### Key Findings

- Most customers felt neutral or negative towards this rate plan, especially in the Time-of-Day and General Population groups.
- Participants cited 'easier to control when I do things, than amount of use'
- Some noted that the risk was lower because the ratio between on- and off-peak prices was less extreme.
- Switching energy usage behavior would be easy for some things, but not for others.
- Participants felt this program would be difficult to participate in during summer months because the A/C is on, kids are home – energy use will be difficult to change.

	Total*	Grp #1 TOW	Grp #2* General	Grp #3 TOD	Grp #4 TOW
<b>Reaction to Design 2: Time-of-Day Rate Plan</b>					
Total Positive	28%	50%	12%	20%	30%
Very positive	6	10	12	0	0
Somewhat positive	22	40	0	20	30
Neutral	50	30	50	70	50
Total Negative	25	20	50	10	20
<b>Design 2: Time-of-Day Rate Plan Could Benefit Me</b>					
Yes	28%	30%	12%	40%	30%
No	22	20	38	20	10
Neutral/Don't Know	48	50	50	40	50
Missing	2	0	0	0	10

\*Multiple responses included in calculation.

## Time-of-Day Plan Design Concept 2

Program Features	
On-Peak Rate:	2 times the Off-Peak rate
On-Peak Period:	3PM - 7PM Monday-Friday (20 hrs. a week)
Program Timeframe:	June through September

Assuming an average household uses about 20% of its electricity during "on-peak" hours and 80% during "off-peak" hours and assuming the average household's electric bill is \$100 per month on a flat rate, the table below shows what might happen to this household's bill under this rate plan.

	Standard Monthly Cost	Monthly Cost w/ Time-of-Day	Monthly Savings
Household shifts 5% of its total electricity use to on-peak (25% on-peak/75% off-peak)	\$100	\$104	-\$4
No change, the household continues to use electricity as usual (20% on-peak/80% off-peak)	\$100	\$100	\$0
Household shifts 5% of its total electricity use to off-peak (15% on-peak/85% off-peak)	\$100	\$96	\$4
Household shifts 10% of its total electricity use to off-peak (10% on-peak/90% off-peak)	\$100	\$92	\$8

## Reaction to Time-of-Day Plan Design Concept 2

### Comments

#### POSITIVE

"I just think that it's so targeted, it's very justifiable and it's very easy to understand. The times that are specified, it makes sense and it's easier for me to understand, therefore it makes more sense for me to want to shift my habits." (Group 2 General Public, 8:00pm)

"With this plan, the reason I like it, the only reason I liked it, is that not changing your habits doesn't penalize you. You're spending just as much, so not changing habits doesn't penalize you, you're not suddenly paying more for your power bill than you used to under the flat rate, according to this." (Group 1 Time-of-Week, 5:30pm)

"I said positive, because AC usage in our house is essential in the summer for that time period. So, I'm not getting killed by the 6X charges like the first model, but the savings are not as good. Are you going to be cheap high or cheap low? I don't know what the breakpoint is." (Group 3 Time-of-Day, 5:30pm)

"I like this one because there was less risk and just the environmental thing in mind, I would be more likely to care about signing up for this plan because if I did have high usage during the peak time, it would affect me less. I wouldn't end up with a higher bill because of this plan. And in the end, it would, hopefully, benefit the environment." (Group 3 Time-of-Day, 5:30pm)

"I just like the idea that you're saving energy in turning things off. Not for the money, but just less usage, period, I did it this summer, I did it last summer, and the bill was smaller, but we also saved a lot of energy." (Group 4 Time-of-Week, 8:00pm)

"I can control when I'm using things a little easier than the actual amount that I use, in our situation, I'm positive, but I'm kind of leaning towards neutral on this because the saving is not as great. On the other hand, you get an extra hour of off peak to have a little more flexibility in how you're conserving." (Group 4 Time-of-Week, 8:00pm)

## Reaction to Time-of-Day Plan Design Concept 2

### Comments (cont.)

#### NEUTRAL

"I said neutral because I wasn't sure how many changes I could make so that I could get the savings because I do the bigger things. When I stop and think about three to seven, how many electrical appliances are used, somebody's on the computer, they're watching TV or two TVs going, the AC's on, all the other things are running in the house at that time. So what do you stop or how do you change that?" (Group 2 General Public, 8:00pm)

"I am neutral. I work Monday through Friday and I usually don't get home until 5:30. So it would be okay for me, but my husband has two or three days off during the week and that's whenever he's supposed to be doing chores, but usually playing video games. So he does use a lot of electricity during the day. He does run the dishwasher a lot. He does do laundry during that time. So I don't know if it would really benefit if he's there, but I am not." (Group 2 General Public, 8:00pm)

"To me, I am neutral. The benefits aren't big enough for me to switch to it. Years ago the phone company did that, if you called certain hours of the day it was higher and they just did away with it. They made the same price for everybody." (Group 1 Time-of-Week, 5:30pm)

"You're constantly changing the benchmark, so if you start an offered sample and you're able to reduce your efficiency, maybe five or ten percent, then the following year that's your benchmark. With each year that comes, at some point, it's just going to reach the point where it's not worth it." (Group 1 Time-of-Week, 5:30pm)

## Reaction to Time-of-Day Plan

### Design Concept 2

#### Comments (cont.)

##### NEGATIVE

"This is during the summer and that's when you're electricity bill goes up. And with kids home, you have time frames from three to seven. Your electricity bill is higher in the summertime anyway, and I think it would even go higher." (Group 2 General Public, 8:00pm)

"I just thought that it would be too much work for me. I would be running from one room to the next, turn that off, just running around, and it wouldn't be worth it for me. I'd pay the extra ten bucks, 20 bucks, whatever." (Group 2 General Public, 8:00pm)

"I was in between negative and neutral, it's the middle of the summer. Three o'clock in the afternoon is a really hot time of day. There are so many ways that you're going to use energy. Between three to seven is like a really bad time. You've got to cook dinner, you've got to watch TV. I don't know how it would affect me. It seems like a bad idea." (Group 2 General Public, 8:00pm)

"That three to seven thing bothers me because that's the time where a lot of people are coming home from work and making dinner and using their electric stoves, and turning lights on. I don't know, that kind of bothers me because that's on peak period. When I am coming home I am using a lot of electricity." (Group 1 Time-of-Week, 5:30pm)

"\$4 or \$6 a month, that's nothing in a whole budget. Maybe if it is a double digit, I don't know where my line is and I couldn't tell you why, but it just seems less impressive to me." (Group 3 Time-of-Day, 5:30pm)

"The savings were so minimal that I probably wouldn't be influenced to change except for the green benefits of thinking. 'I'll do my best'. And if I save a few buck I'll buy a scratch ticket. It would not influence me to guide my decision." (Group 3 Time-of-Day, 5:30pm)

"I just don't think it's enough an incentive to do this. And if somebody else does it, that would be fine, but it's not for me." (Group 4 Time-of-Week, 8:00pm)

## Time-of-Week Plan

### Design Concept 3

#### Key Findings

- Most customers felt neutral or negative towards this rate plan.
- Participants felt that moving energy usage to the weekend would be difficult to manage, with busy weekend schedules.

	Total*	Grp #1 TOW	Grp #2 General	Grp #3* TOD	Grp #4 TOW
Reaction to Design 3: Time-of-Week Rate Plan					
Total Positive	31%	50%	12%	10%	50%
Very positive	8	20	0	0	10
Somewhat positive	23	30	12	10	40
Neutral	39	40	38	40	40
Total Negative	32	10	50	60	10
Design 3: Time-of-Week Rate Plan Could Benefit Me					
Yes	26%	40%	25%	10%	30%
No	29	20	37	50	10
Neutral/Don't Know	42	30	38	40	60
Missing	3	10	0	0	0

\*Multiple responses included in calculation.

## Time-of-Week Plan Design Concept 3

Program Features	
On-Peak Rate:	2 1/2 times the Off-Peak rate
Program Timeframe:	Year Round

The average household uses about 60% of its electricity during weekday hours and 40% during weekend hours. Assuming the average household's electric bill is \$100 per month on a flat rate, the table below shows what might happen to this household's bill under this rate plan.

	Standard Monthly Cost	Monthly Cost w/ Time-of-Week	Monthly Savings
Household shifts 5% of its total electricity use to weekdays (65% weekday/35% weekend)	\$100	\$104	-\$4
No change, the household continues to use electricity as usual (60% weekday/40% weekend)	\$100	\$100	\$0
Household shifts 5% of its total electricity use to weekends (55% weekday/45% weekend)	\$100	\$96	\$4
Household shifts 10% of its total electricity use to weekends (50% weekday/50% weekend)	\$100	\$92	\$8
Household shifts 15% of its total electricity use to weekends (45% weekday/55% weekend)	\$100	\$88	\$12

## Reaction to Time-of-Week Plan Design Concept 3

### Comments

#### POSITIVE

"I like it because it's all year savings, it's not just May through September. I have a heat pump and I have an all-electric house. It's not efficient at all in this area...in the house that I live in, at least. I always have heat or AC going, so to me I would prefer to have something that's all year long."  
(Group 1 Time-of-Week, 5:30pm)

"I like the program for a simple fact, I had a rate to compare. My peak charge is two and a half times what my on-peak is... I think if I have the facts given to me where in my mind I am saying, do I want to pay twelve cents or do I want to pay a nickel, I'd rather consciously move things into the nickel slot."  
(Group 2 General Public, 8:00pm)

"A lot of things I am not going to like because I work from home a lot. So the peak hours, I am home. That's a problem as well."  
(Group 2 General Public, 8:00pm)

"This would have the least impact on me. It doesn't seem like there is a whole lot to it; you can just keep on doing what you're doing if your baseline is the same."  
(Group 3 Time-of-Day, 5:30pm)

"I initially thought very positive because it's no new situation. If you change nothing, nothing happens. Then I thought maybe it's a positive because I was thinking I'm already saving, already conserving, then my baseline is going to be low."  
(Group 3 Time-of-Day, 5:30pm)

"There is really not much savings, but then again, there is not penalty. You know, \$12 a month isn't going to like make or break my family budget, but \$4 extra isn't going to kill me either. It would be a nice little bit of savings, but I wouldn't be afraid to turn on a light in my house, but the first one horrified me."  
(Group 4 Time-of-Week, 8:00pm)

## Reaction to Time-of-Week Plan

### Design Concept 3

#### Comments (cont.)

##### NEUTRAL

*"First of all I don't think the savings is all that great. It's under twenty dollars for the month, that's not a huge amount. The other thing is I already do a lot of this stuff on the weekends so I don't know what more to get switched to the weekends from what we already do, and we're also home more. It just doesn't seem like there's much that could be changed. There's just not a lot of financial incentive one way or the other."* (Group 1 Time-of-Week, 5:30pm)

*"I am neutral on it. It just seems like it depends on what a family situation is on this. For the savings, it's not that great. It's something it seems like you could do for a family, there are just two of us, so that would do nothing for me and my wife."* (Group 1 Time-of-Week, 5:30pm)

*"I was kind of neutral about it because if you did nothing, it's not really going to impact you. But if you try to reduce things, start unplugging all my charges and electrical devices after the baseline period, eventually I will see a savings. I would imagine eventually there's going to be another baseline analysis period, and now how do I get that rebate? I've got to reduce it 5% more or 10% more. So, that kind of made it neutral for me."* (Group 3 Time-of-Day, 5:30pm)

*"Mine was neutral, there doesn't appear a significant enough discount for significant lifestyle changes you may need to make, because now, what used to be your weekends when you want and did things. Now, you're doing laundry or you're doing this or you're doing that, trying to shift the electric usage. It could be a positive with maybe more of a discount, and maybe you didn't have to make as many changes. If it's easy and I can do something that benefits, both the electric company and myself, then yes."* (Group 4 Time-of-Week, 8:00pm)

*"If you're working all week and you turn the air on in the summertime, for example, you have to use a lot of electricity to get it up to cool it off fast enough if you keep it low while you're not there. And then on weekends, if those people who don't work on weekends and you're trying to do things family oriented, you don't benefit from it because you're not home to use the electricity when it is at its cheapest."* (Group 4 Time-of-Week, 8:00pm)

## Reaction to Time-of-Week Plan

### Design Concept 3

#### Comments (cont.)

##### NEGATIVE

*"I just thought that looking at that rate chart that the savings didn't seem great enough to really entice me to change the way that I am doing things currently. I kind of do a lot already in the evenings and weekends and I don't know how much more I could do. It didn't seem like a benefit for me, personally, the way I already am doing things."* (Group 2 General Public, 8:00pm)

*"I work on the weekends and I can't say to my husband, you have to do the laundry and the dishes and clean the house. I don't want to turn into a horrible cgre. We have one day a week that we can spend as a family, it's on a Sunday, and I work on Saturdays, so it's unreasonable to think that I am going to shift all of my energy usage to weekends."* (Group 2 General Public, 8:00pm)

*"So what about the things that constantly run, like your refrigerator and air conditioning in the summer time? There are things that constantly run that you don't have control over."* (Group 2 General Public, 8:00pm)

*"I was negative because it's not going to change too much of what we do because we're doing everything that we can do already, and we can't change it to the weekend."* (Group 3 Time-of-Day, 5:30pm)

*"I have special work schedule: I don't have a Monday through Friday job. So, this is saying that if I want to save any money, when would I have to do my jobs. I can't do it in the evenings and I have to do it on the weekends."* (Group 4 Time-of-Week, 8:00pm)

## Energy Reduction Rebate Plan Design Concept 4

### Key Findings

- The Energy Reduction rebate had the highest positive rating overall among the four plans in each of the four groups.
- Participants felt that they could save money by doing things they already do – such as turning off lights when not in use.
- Some participants were skeptical about the 'baseline' period. Continued rebates would be difficult to achieve after two or more years.

	Total*	Grp #1 TOW	Grp #2 General	Grp #3* TOD	Grp #4 TOW
<b>Reaction to Design 4: Energy Reduction Rebate Plan</b>					
Total Positive	71%	60%	75%	70%	80%
Very positive	5	10	0	10	0
Somewhat positive	66	50	75	60	80
Neutral	16	20	12	20	10
Total Negative	18	20	13	30	10
<b>Design 4: Energy Reduction Rebate Plan Could Benefit Me</b>					
Yes	51%	30%	62%	40%	70%
No	13	30	0	10	10
Neutral/Don't Know	34	30	38	50	20
Missing	2	10	0	0	0

\*Multiple responses included in calculation.

## Energy Reduction Rebate Plan Design Concept 4

Program Features	
Program Timeframe:	Year Round

	Monthly Savings
Household reduces its weekday electricity usage by 5% compared to a baseline period	\$5
Household reduces its weekday electricity usage by 10% compared to a baseline period	\$10
Household reduces its weekday electricity usage by 15% compared to a baseline period	\$15



## Energy Reduction Rebate Plan Design Concept 4

### Comments

#### POSITIVE

*"What I like about the idea is it's simple. It's not based on your usage where you have to control it this time of day, this day of week, et cetera, and you can keep your patterns as you want and you can do what you can to get the more energy efficient light bulbs or experiment with having the thermostat a little bit higher and see how that works. I think it would be easier to sell. But he's absolutely right, at some point the benchmark, if it keeps shifting, there won't be a benefit."* (Group 1 Time-of-Week, 5:30pm)

*"I think the savings justify it. I do shut off my surge protectors most of the time, you know, down in my basement for my DVRs, TV, all those things. I shut them off all the time. I see a change just from doing that. I mean, this is going to push me to do it even more."* (Group 1 Time-of-Week, 5:30pm)

*"I just think that money is a very visible reward, it's a very easy to understand reward structure."* (Group 2 General Public, 8:00pm)  
*"This would have the least impact on me. Doesn't seem like there is a whole lot to it, you can just keep on doing what you're doing if your baseline is the same."* (Group 3 Time-of-Day, 5:30pm)

*"Say the baseline is \$900, and I'll have to get 10% less. Now in the next month I have to get 10% less also on the baseline. I think it's doable if we have Smart Meter and we know the baseline, we can worked towards it. So, we can put this money right into the account."* (Group 4 Time-of-Week, 8:00pm)

*"You know, you can possibly achieve the goal and get the money, you're rewarded, but if you don't make it, you're not penalized. So, I don't see a problem with that. It gives you an incentive."* (Group 4 Time-of-Week, 8:00pm)

*"I'm in favor of it. I have a programmable thermostat as well and for 5% reduction, turn the air conditioning temperature up by 2". So, it's not bad. I mean this summer and all that heat, I didn't want to tax my AC unit, it saves the wear on it, I can turn it up to 80". We usually have it at 78", you know, now we can turn it up to 80"."* (Group 4 Time-of-Week, 8:00pm)

## Energy Reduction Rebate Plan Design Concept 4

### Comments (cont.)

#### NEUTRAL

*"Incentivize it rather than punish it, but it's not sustainable. If I reduce my energy by 15% this year, then next year in order to get that bonus I have to reduce it by another 15%, which makes it 30%, and the next year I have to reduce it by 80%. That means in five years I would be living in the dark in my backyard. It's awesome for the first year, but anybody who is thinking about long-term finances, that means I am going to get either punished or no reward in the second or third or fourth year."* (Group 2 General Public, 8:00pm)

*"I was kind of neutral about it because if you did nothing, it's not really going to impact you. But if you try to reduce things, start unplugging all chargers and electrical devices after the baseline period, well, eventually I will see a savings. I would imagine eventually there's going to be another baseline analysis period, and now how do I get that rebate? I've got to reduce it 5% more or 10% more."* (Group 3 Time-of-Day, 5:30pm)

*"I was neutral on this one. My concern is: how would you monitor it throughout the month to know if you were on target for your savings or not? So, there would be a potential that you would think that you're saving, but in reality, you know, you may not be saving more. If there was some other way to monitor it."* (Group 4 Time-of-Week, 8:00pm)

## Energy Reduction Rebate Plan

### Design Concept 4

#### Comments (cont.)

##### NEGATIVE

"Ultimately you can't reduce, you can't drop yourself to zero, right? You're going to get yourself to some point where you just can't afford to switch anything else off anymore without some sort of major... there's just stuff I can't switch off, and I can't not use my fridge or something." (Group 1 Time-of-Week, 5:30pm)

"It's not enough of incentive for the inconvenience. I feel that if you had to reduce your energy, you'd have to buy candles to meet that 5% or stay out of the house more often doing other activities, that that \$5 would be gobbled up. It's just not enough incentive for me to want to be bothered." (Group 4 Time-of-Week, 8:00pm)

"It's sort of restricted timing of the weekend versus weekday and shifting. There is this thing about the baseline period, and not that I am perfect about my energy consumption at home, but I really feel like we do a lot to decrease our energy usage already. If someone came to my house tomorrow to establish a baseline, I'd feel like I'm doing as much as I can from an easy standpoint with the light bulbs and turning stuff off, know that I could shift more of time to the weekends, and I'm not sure I could even just lower my baseline usage anymore based on all this stuff I'm turning off and unplugging and energy efficient appliances that we've replaced, and that sort of thing. I think my baseline is already low, so I'm not sure I could lower it any more." (Group 3 Time-of-Day, 5:30pm)

"The baseline period would penalize people that are already efficient." (Group 3 Time-of-Day, 5:30pm)

"I was negative because it's not going to change too much of what we do because you know, we're doing everything that we can do already, and we can't change it to the weekend." (Group 3 Time-of-Day, 5:30pm)

## Peak Time Rebate Plan

### Key Findings

- All groups rated this program "Positive," or "Very Positive"
- Participants felt this was the easiest to follow, and to put into practice
- Most participants liked the added bonus of "doing the right thing to help out," helping out the environment
- Many liked the idea that they would not be penalized if they did not change their behavior

	Total*	Grp #1 TOW	Grp #2* General	Grp #3 TOD	Grp #4 TOW
<b>Reaction to: Peak Time Rebate Plan</b>					
Total Positive	90%	60%	100%	100%	100%
Very positive	23	10	12	30	40
Somewhat positive	67	50	88	70	60
Neutral	8	20	12	0	0
Total Negative	5	20	0	0	0
<b>Peak Time Rebate Plan Could Benefit Me</b>					
Yes	51%	30%	62%	40%	70%
No	13	30	0	10	10
Neutral/Don't Know	34	30	38	50	20
Missing	2	10	0	0	0

\*Multiple responses included in calculation

## Peak Time Rebate Plan

### Explanation and Example

#### What Is "Peak Time Rebate?"

- When the demand for electricity is highest, such as on very hot summer afternoons, the cost of electricity is driven up and there can also be reliability problems – outages become more likely because the system is "overloaded."
- In addition, at these times of peak demand, older, less environmentally friendly generation plants must be used to their full capacity to meet customer needs, which results in the emission of additional pollutants and greenhouse gases.
- Utilities can offer customers an opportunity to save money while helping to address these challenges. For example, customers could sign up for a program in which they would agree to reduce their electricity usage for a few hours during a few afternoons each summer, when the utility notifies them that demand is extremely high.
- Participating customers would receive a credit on their bill for reducing consumption when requested, in addition to the savings they would achieve by using less power.

#### What Is "Peak Time Rebate?"

A peak time rebate could help customers save money if they reduce energy use on peak-event days when electricity demand is high.



\*Example only for frame of reference

## Peak Time Rebate Plan

### Comments

#### POSITIVE

"When we were in Florida we had to do that with the water. I am sure there would be days where you might not want to. But I am sure everyone could do something, whether it's unplugging the coffee maker or whatever." (Group 2 General Public, 8:00pm)

"The thing that I liked about it is that it's a dialogue, it's not a demand. I think they actually pretty much already do this, they just don't offer a benefit. A lot of times during the summer different news stations will say if you can, please turn off your power. A lot of people I know do. They say, please turn it down because we don't want another blackout like 2003 or something. But the fact that it shifts from being this compulsory thing to being more of a dialogue, opt in, opt out, is really good to me." (Group 2 General Public, 8:00pm)

"Not only would I be saving some peak time dollars, I am also helping the community and helping the environment." (Group 2 General Public, 8:00pm)

"I like the idea of helping protect the community. If the power goes out, it can be just a minor inconvenience for some people, but people who are on oxygen, who are totally confined, it can be really serious." (Group 1 Time-of-Week, 5:30pm)

"There is no downside. If you want to participate, you can, if you opt out, then okay." (Group 3 Time-of-Day, 5:30pm)

"It's an occasional thing too. Six, seven times during the summer, you're not doing it every day or every week. We'll take one day and we'll make a big change and maybe not turn the TV on or not do the washing or whatever. It's not going to impact my daily life that much if it's occasionally." (Group 3 Time-of-Day, 5:30pm)

"It's very altruistic. The money is nice, but you're kind of being asked to pitch in for the better good, the good of everybody." (Group 3 Time-of-Day, 5:30pm)

"It also makes people feel good because you're letting us know how we can help. So, you're saving...I can help out everybody." (Group 4 Time-of-Week, 8:00pm)

## Peak Time Rebate Plan

*Comments (cont.)*

### NEUTRAL

*"It seemed like a great idea at first but then I thought, you know, I might get tired of getting all these texts or however they're notifying me during this."* (Group 2 General Public, 8:00pm)

### NEGATIVE

*"I just don't want to be told what to do when. I'd rather want to have the opportunity to do it when I want to do it off-peak. I just don't want to be told what to do, I want to be comfortable in my house."* (Group 1 Time-of-Week, 5:30pm)

*"I just think they can overstep their boundaries, maybe call us too often and maybe come more of a nuisance."* (Group 1 Time-of-Week, 5:30pm)

## Time-of-Use Payment Options

### Key Findings

- **Most participants chose the plan that they are currently on**, noting that this type of plan already worked for their household.
- Customers who chose the Pre-Paid option liked that there was no deposit required – which would benefit low-income households. However, many did not like the concept of having to remember to add money to an account to keep power on.

	Total	Grp #1 TOW	Grp #2 General	Grp #3 TOD	Grp #4 TOW
<b>Time-of-Use Payment Plan Options</b>					
Monthly Billing	55%	90%	50%	40%	40%
Budget	29	10	38	40	30
Pre-Paid	16	0	12	20	30

## Time-of-Use Payment Options

### Explanation

	Payment Option	Description
<input type="radio"/>	Monthly Billing Plan	With the Monthly Billing Plan, you receive a bill at the end of each month for the amount of electricity you used. For this option, you must establish credit with Duquesne Light, which means providing Duquesne Light with your social security number, passing a credit check, and possibly paying a deposit.
<input type="radio"/>	Budget Payment Plan	With the Budget Payment Plan, you pay the same amount each month based upon an estimate of your average yearly usage. At the end of each year, there is a true-up. You receive a credit if you paid more than what you used. Or, you receive a bill for the difference if you paid less than what you used. For this option, you must establish credit with Duquesne Light, which means providing Duquesne Light with your social security number, passing a credit check, and possibly paying a deposit.
<input type="radio"/>	Pre-paid Plan	With the Pre-Paid Plan, you add funds to an online account, similar to how you fill your car's gas tank (except this is an "electricity tank"). As you use electricity, funds are deducted based upon the amount you use. A "fuel gauge" is provided to you online, via e-mail, or on your cell phone, with alerts if you are running low. For this option you do not need to establish credit with Duquesne Light.

## Time-of-Use Payment Options

### Comments

#### Monthly Billing Plan

*"Because it gives me a reminder once a month of how it's costs and how much I'm using, because I don't have time to look on a day-to-day basis for how much energy I'm using. This is sort of a monthly reminder, this is how much I use, and I can review it. I like monthly basis instead of daily basis."* (Group 3 Time-of-Day, 5:30pm)

*"I just like to pay for what I'm using per month"* (Group 3 Time-of-Day, 5:30pm)

*"Why give the money up before I have to. And I pay as I go. You know, I don't want it to be... I mean I pretty much deal with electricity process for a long time. I can tell you pretty much what it's going to be and I prefer to pay for what I'm going to use than giving you my money so that you can sit there with it."* (Group 4 Time-of-Week, 8:00pm)

*"I would prefer just the monthly bill like I do now, pay it, and be done with it."* (Group 4 Time-of-Week, 8:00pm)

*"I do mine online, I have them do it automatically. I don't even have to send a check, so that makes it nice. I like that option."* (Group 2 General Public, 8:00pm)

#### Budget Payment Plan

*"I tried the budget plan before and the thing I don't like about it is we aren't all electric, we're electric and gas. So we're higher on our electric bill in the summer and higher on our gas during the winter. If I do the budget on electric I am paying more at certain periods and they offset each other if I just leave them and pay by the month."* (Group 1 Time-of-Week, 5:30pm)

*"My electric bill can be close to \$400 because of the all electric. And there is no way I can spend \$400 a month in electricity, \$200 is around what my budget monthly is. So that is my preferred method."* (Group 1 Time-of-Week, 5:30pm)

## Time-of-Use Payment Options

### Comments (cont.)

#### Budget (cont.)

*"I like planning ahead financially. I like to be able to say 'I have X amount per month on this, that and the other things'." (Group 2 General Public, 8:00pm)*

*"I just like being the same each month and that way it doesn't fluctuate too much, it doesn't go really up. You just have a constant. You can just figure out your bills better that way then come summer you're not doubling or tripling the bill." (Group 2 General Public, 8:00pm)*

#### Pre-paid Plan

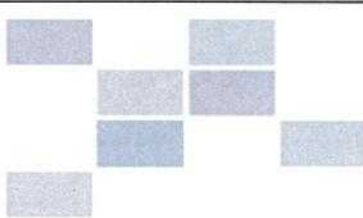
*"It says you don't need a credit check. For people who don't have good credit, they could go on that kind of plan. You have to possibly pay a deposit with Duquesne, and like maybe they wouldn't have the money for that, then they could go on the prepaid plan." (Group 1 Time-of-Week, 5:30pm)*

*"I know I have bad credit so I wouldn't be able to pass a credit check. I am on budget now, but I don't think everybody has good credit or they'd be able to get that. So I would have to do the prepaid plan." (Group 2 General Public, 8:00pm)*

*"I just think that would be more incentive for me to manage my electricity and use it less if I saw there was a gauge that it's going down. It's just a mental thing." (Group 3 Time-of-Day, 5:30pm)*

*"I don't like getting out my Social Security number to anyone. I am very cautious with that... So, if I have to choose one, that's the only one that doesn't require me to do that." (Group 4 Time-of-Week, 8:00pm)*

*"I have kind of a hard time with this credit check... You have to have gas. You have to have electricity. There are things you have to have. And, I think it's kind of despicable to expect them to have to run your credit and say you don't have good enough credit. Sorry, you can't have electricity." (Group 4 Time-of-Week, 8:00pm)*



## Detailed Findings with Customer Comments Other Topics

## Communication Channels

### Comments from Discussion

"I throw my bill away, I don't read the newsletter, I don't want to go on the Web, I don't read my emails, but maybe 25 commercials during half-time, it might sink in." (Group 1, Time-of-Week 5:30pm)

"Put it on the web" (Group 1, Time-of-Week 5:30pm)

"I like the newsletters. I always read that newsletter." (Group 1, Time-of-Week 5:30pm)

"Yes, send it with the bill, however the bill comes." (Group 1, Time-of-Week 5:30pm)

"Email. But not everyone has a computer, so I guess... and the mail or whatever every month with your bill or a phone call." (Group 2 General Public, 8:00pm)

"I think a combination maybe with some TV advertisement and then some print, the print be divided in the local newspapers and your circulars that you get, stuffers, with the bill." (Group 2 General Public, 8:00pm)

"I don't know that I really pay attention to the actual paper bill. I don't even know that I get one because I pay it online." (Group 2 General Public, 8:00pm)

"They could do a Facebook page and say Like our page, you'll get five dollars off your bill" (Group 2 General Public, 8:00pm)

"A website where you could do analysis...scenarios based on usage...here is the information that we know about what you do, and here are the different plans." (Group 3, Time-of-Day 5:30pm)

"I think if they're trying to get it out in general, it's probably snail mail is best, but for me personally, email would be better." (Group 4, Time-of-Week 8:00pm)

### Key Findings

- While customers suggested that communication plans using the full range of media will be needed, they also identified several specific channels:
  - Email
  - Direct Mail
  - Text
  - Corporate website
  - Bill inserts
    - While some indicated that bill inserts could be a suggested approach, others said they are not being frequently reviewed.

## Understanding Monthly Bill Information

### Comments from Discussion

"I can't rattle one off but I know there are components to it." (Group 1, Time-of-Week 5:30pm)

"I could give you an idea on my bill, like there's a line charge...distribution charge, the line charge, the actual energy charge, and then the taxes, naturally. And then there's a customer service fee for just being a customer of Duquesne Light." (Group 2 General Public, 8:00pm)

"I am on a budget, so I don't ever look. I pay the same amount all year." (Group 2 General Public, 8:00pm)

"I think so but I'm not sure. When I pay the bills, that's when I manage and make the decisions and then I kind of forget about it until the next month." (Group 3, Time-of-Day 5:30pm)

"The generation, the transmission and I think taxes" (Group 4, Time-of-Week 8:00pm)

### Key Findings

- Nearly all customers were able to recall the dollar amount of their electric bill.
- A small number of customers were able to mention line items that are included in the total bill.

## Smart Meter Implementation

### Comments from Discussion

"I want to see graphs of usage over time at [the very] least, by the hour. Over the course of a day, what does my hour use look like, because even if the Smart Meters can't necessarily know what appliances I am using or whatever, I can figure that out pretty easily." (Group 1, Time-of-Week 5:30pm)

"I think that time of day would help because I can go online now and see my daily usage." (Group 1, Time-of-Week 5:30pm)

"Comparisons. If we were doing this we would save this. Comparison charts." (Group 1, Time-of-Week 5:30pm)

"Smart Meters would be good because I would try, I'd make more of an effort, to use my appliances or different things at certain hours." (Group 2 General Public, 8:00pm)

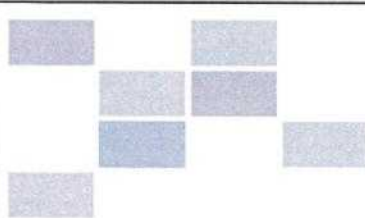
"Smart Meter can show you where your energy usage is and help you have a little bit more control over what you're doing and know more knowledge about what you're doing. And for those who are environmental minded, it's a little bit of a nitch, like oh I can save five bucks." (Group 3, Time-of-Day 5:30pm)

"You can make an impact on the environment as well as your finances. So, I think it's a positive thing to look at those different alternatives." (Group 4, Time-of-Week 8:00pm)

"I think I want just a little bit more background. You know, they're talking about the rates, different peak times, off peak times. So, what is the impact? What percentage are we talking about?" (Group 4, Time-of-Week 8:00pm)

### Key Findings

- Customers are interested in being able to track daily and hourly usage, view statistics online and the ability to compare usage over time.
- Ability to have greater control over energy usage
- Assist with conservation efforts which can ultimately improve the environment
- Curiosity for more information



## Appendices Moderator's Guide and Paper & Pencil Activities



## Moderator's Guide

### DUQUESNE LIGHT FOCUS GROUPS MODERATOR'S GUIDE – RESIDENTIAL – DRAFT 3 OBJECTIVES

•To explore general customer perceptions and opinions about DLC and its programs and services.

•To determine participants' current awareness of dynamic (time-of-use or TOU) pricing and smart meters.

•To provide basic information about dynamic pricing and then understand positive and negative customer reactions to the general concept and drivers of fear/uncertainty/doubt.

•To understand what benefits and features of a TOU pricing program would be of greatest/least interest to customers: alternative time/price structures, systems for providing usage and price information, billing plans, etc.

•To probe communication preferences relating to TOU programs.

•To provide information about peak time rebates and then discuss what benefits and features of a PTR program would be of greatest/least interest to customers and identify roadblocks and drivers of fear/uncertainty/doubt.

#### I. INTRODUCTION (5 MINUTES)

•Moderator welcomes the participants and familiarizes them with the focus group rules and facility (e.g., no right or wrong answers, microphones, videotaping).

•Participants introduce themselves: First name, where they live, what they do for a living, HH size, anything unique or unusual about the way their HH uses electricity (medical device, heated pool/hot tub, etc.).

•Moderator introduces topic: Here to talk about DLC's services to you, and what you might expect from them, now and in the future. We'll be talking about some possible new ideas and technologies, and getting your thoughts and reactions.

•Your ideas will be very valuable to us, so input from all sides is encouraged, although I may need to move us along from time-to-time to keep us on track as we use up the time we have together.

#### II. GENERAL DLC DISCUSSION (10 MINUTES)

*Let's start off with a very general question...*

1. In the past three months or so, what have you seen, heard or read about DLC?

[Probes]

- What else? Anything else? Other topics?
- Where did you read/see/hear it?
- Did what you read/saw heard strike you as positive, neutral or negative? Why?

2. Other than distributing electricity to your homes, is anyone familiar with any programs or services that DLC makes available for customers? Do you participate in any of these programs?

[Probes]

- Do you participate in any of these programs?
- What do you like/dislike about them?
- Anything else??
- Are these good things for DLC to be doing?
- How valuable are they?
- Which are most/least valuable? Why?
- Are there other types of programs you feel DLC should offer?

## Moderator's Guide (cont.)

**NOTE: IF DYNAMIC PRICING OR SMART METERS ARE MENTIONED, DEFER THE DISCUSSION UNTIL LATER IN THE GROUP**

3. Changing topics, do you track or monitor your home energy usage?

How? Why?

Would you be interested in becoming more active in using electricity more wisely? Why/why not?

What are the barriers to using electricity more wisely in your home?

4. Do you think of DLC as a technology leader or a follower? Why?

#### III. TOU SMART METER AWARENESS (10 MINUTES)

*Let's turn to the sheets we asked you to fill out while you were waiting for the group session to begin. [Note: See PowerPoint Example 1.]*

[SHOW OF HANDS FOR AWARENESS OF TOU AND SMART METERS. MODERATOR GOES AROUND THE TABLE ASKING EACH PARTICIPANT QUESTIONS ABOUT TOU AND SMART METERS.]

7. Realizing that most people don't know too much about these concepts yet, tell me what you wrote down about Smart Meters. What do those words mean to you at this point? How did you learn that? (Repeat for TOU.)

8. What about the benefits? Did you write anything down about how a person like you might benefit from the new Smart Meters? What did you say? (Repeat for TOU.)

9. Did you note any Smart Meter concerns? What are they? Why might that be an issue? (Repeat for TOU.)

#### IV. BROAD DISCUSSION OF DYNAMIC PRICING (15 MINUTES)

Let me give you a bit more information about the time of use pricing, and then we will go on talking about it.

[MODERATOR SHARES TOU HANDOUTS [Note: See PowerPoint Example 2.] AND PROVIDES HIGH LEVEL INFORMATION ABOUT TIME OF USE PRICING. MODERATOR ALSO GENTLY CORRECTS MISPERCEPTIONS THAT MAY HAVE BEEN UNCOVERED IN THE DISCUSSION BASED ON THE INITIAL PENCIL & PAPER EXERCISE, AND TRIES TO MAKE SURE ALL PARTICIPANTS HAVE A CLEAR AND ACCURATE UNDERSTANDING.]

*OK, so now we all share a common, basic understanding of what "time of use" electric rates are. Based on this new information, please take a pencil and fill out the first reaction page in the package in front of you [Note: See PowerPoint Example 3.], which asks for your overall, initial reactions to the concept as I've explained it so far.*

[Write-downs include positive/negative/neutral initial reaction with reasons; potential benefit; what like best about the idea; what like least/potential roadblocks.]

[MODERATOR ASKS EACH PARTICIPANT QUESTION 10]

10. What did you write down? What is your reaction to time of use pricing now?

[Probes]

- Positive/negative/neutral? Why?
- Is this something that could benefit you? Why/why not?
- What do you like most about the idea? Why?
- What do you like least about the idea? What are the roadblocks?

## Moderator's Guide (cont.)

### V. DISCUSSION OF TOU SPECIFICS (30 MINUTES)

*Next, I'm going to give you more information about some of the specific ways that a time of use pricing program might be structured. Then we'll talk about your reactions.*

USING HANDOUTS, ONE AT A TIME, MODERATOR SHARES MORE DETAILED INFORMATION ABOUT SPECIFIC TOU PROGRAM ALTERNATIVES (DEFINED SIMILARLY TO THE WAY THEY WERE DEFINED IN THE SURVEY) AND TRIES TO MAKE SURE ALL PARTICIPANTS HAVE A CLEAR AND ACCURATE UNDERSTANDING OF EACH.] [Note: See PowerPoint Example 4.]

AFTER FIRST EXPLANATION:

*OK, based on this new information, please fill out the third page of the form in front of you, which asks for your initial reactions to this more specific program. [Note: See PowerPoint Examples 5-8.]*

*[Write-downs include positive/negative/neutral initial reaction with reasons; potential benefit; what like best about the idea; what like least/potential roadblocks.]*

[MODERATOR ASKS EACH PARTICIPANT QUESTION 11.]

11. What did you write down? What is your reaction to this program?

[Probes]

- Positive/negative/neutral? Why?
- Is this something that could benefit you? Why/why not?
- What do you like most about the idea? Why?
- What do you like least about the idea? What are the roadblocks?

MODERATOR REPEATS ABOVE PROCESS FOR EACH OF FOUR SPECIFIC ALTERNATIVE PROGRAMS TO BE DISCUSSED.

12. Would you prefer to have Duquesne Light, which is an electric distribution company, provide Time-of-Use pricing options, or should all electric competitive suppliers be required to provide Time-of-Use pricing options?

13. [General Customer Group Only] Does Duquesne Light currently provide your electric supply or have you switched to another competitive electric supply company?

### VI. TOU PAYMENT TERMS (15 MINUTES)

*Thanks for sharing your reactions. This discussion is really helping us understand how people think about these ideas. Now, I'd like to discuss a slightly different topic, how and when you would pay for electricity if you were to be on one of the time of use plans we have been talking about.*

*I'll now provide you a prototype form, which could be something that you receive in the mail, use online, or perhaps it is explained to you by a customer service representative if you called to sign up for time-of-use pricing. Please read the form and then mark which payment option you'd prefer. Then we'll talk about your answers. [Note: See PowerPoint Example 9.]*

[Probes]

14. Which of the payment plans did you most prefer? What features and benefits of the plan did you find most appealing?

15. Which of the payment plans shown would you least prefer? Why?

## Moderator's Guide (cont.)

### VII. COMMUNICATION CHANNELS (10 MINUTES)

*The next topic I'd like to explore with you tonight is how you would like to get information about new pricing options DLC may introduce.*

16. If DLC wanted to communicate with you about any of the Time-of-Use options we were talking about earlier, and get you interested in participating, what would be the best ways for them to do that?

[Probes]

- Bill stuffers
- Other direct mail, postcards
- Door hangers
- Telephone
- E-mail
- Website
- Social media
- TV
- Radio
- Newspaper
- Community meetings
- Mobile display that visits your community
- Other

17. And suppose that you were enrolled in one of these programs. What kind of communications would you expect from DLC to help you stay interested in the program and stay enrolled?

[Probes]

- Program-specific newsletter
- Tips on benefiting from the program
- Customized analysis of savings through participation
- Information on system-wide benefits of the program
- Other

### VIII. CRITICAL PEAK REBATE (15 MINUTES)

*The next topic I'd like to explore with you is a new type of electricity rate that's a little different from the ones we've talked about so far.*

[MODERATOR SHARES CPR HANDOUT [Note: See PowerPoint Example 10.] AND PROVIDES HIGH LEVEL INFORMATION ABOUT CPR. *OK, so now we all share a common, basic understanding of what "Critical Peak Rebates" are. Based on this information, please take a pencil and fill out the last page of the form in front of you [Note: See PowerPoint Example 10.], which ask for your overall, initial reactions to the concept as I've explained it so far.*

*[Write-downs include positive/negative/neutral initial reaction with reasons; potential benefit; what like best about the idea; what like least/potential roadblocks.]*

[MODERATOR ASKS EACH PARTICIPANT QUESTION 14]

18. What did you write down? What is your reaction to the idea of Critical Peak Rebates?

[Probes]

- Positive/negative/neutral? Why?
- Is this something that could benefit you? Why/why not?
- What do you like most about the idea? Why?
- What do you like least about the idea? What are the roadblocks?

## Moderator's Guide (cont.)

### IX. UNDERSTANDING OF MONTHLY BILL COMPONENTS (5 MINUTES)

19. Do you know how much you pay for electricity each month? (If yes, monthly bill amount).

[Vary briefly discuss/probe with participants about their awareness. Note that Time-of-Use/Reward programs would only affect the electricity supply portion of a customer's bill.]

### X. POSSIBLE SMART METER INFORMATION/CAPABILITIES (5 MINUTES, IF TIME PERMITS)

*There is just one final topic I would like to explore with you further tonight.*

20. If Duquesne Light moves forward with implementing smart meters starting in 2013, and develops a customer website that will gather and summarize the data from the meters, what information or capabilities would be most beneficial to customers like you?

[Possible Examples]

- Ability to compare current month/year to previous month/year (with graphing?)
- A line item stating what they would have paid on the flat rate versus the TCU pricing plan
- A line item that tells customer the percentage they have reduced power usage compared to the same time during the previous year
- Energy usage compared to other customers

### WRAP UP (5 MINUTES)

21. OK, great. Those are all the topics we wanted to cover with you tonight. But I would like to ask each of you to make a final comment, summarizing your overall feelings about the topics we have discussed. How would you describe your feelings about DLC's ideas for using smart meters to offer new alternative rate plans? Positive? Neutral? Negative? Hopeful? Excited? Apprehensive? Concerned? Confused? How do you personally react to all this?

22. Has the discussion tonight changed your view of DLC? Please explain. Do you feel differently about DLC than when you arrived? How have your feelings about DLC been affected? Why?

**Thank participants and remind them to collect incentive checks.**

## Unaided Paper and Pencil Activity Example Pre-Work

### Smart Meters

Have you heard the term "Smart Meters?" (Please circle your response below)

YES      NO      DONT KNOW / NOT SURE

Based on your experience, on what you have heard or just on your initial reaction to the term, please explain briefly what you think Smart Meters are. What new things will they do? How might you benefit as a customer? How might the community/society benefit? Do you have any concerns?

---

---

---

---

---

---

---

## Unaided Paper and Pencil Activity Example Pre-Work

### Time-of-Use Electricity Pricing

Have you heard anything about an alternative way of setting electricity prices, where customers would pay lower or higher rates at different times, depending on the level of demand for electricity and the cost of producing it? This is sometimes called "Time-of-Use" pricing. (Please circle your response below)

YES      NO      DON'T KNOW / NOT SURE

Based on what you have heard or just on your initial reaction, please explain briefly your reaction to this idea. How might you benefit as a customer? How might the community/society benefit? Do you have any concerns?

---

---

---

---

---

---

## Unaided Paper and Pencil Activity Example

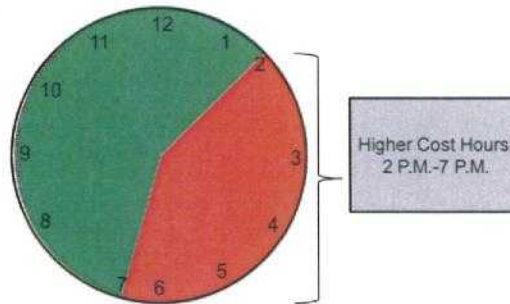
### What Is "Time-of-Use Pricing?"

- Today, nearly all residential electricity customers pay the same fixed rate for electricity no matter when they use it during the day or night. This "flat rate" ignores the fact that, like most things, electricity actually costs more when the demand for it is higher, such as on hot summer afternoons, when many people are using air conditioning.
- With Smart Meters in place, utilities are able to offer customers a new pricing option called Time-of-Use pricing. During most of the day, customers on this new rate plan would pay less for electricity than flat-rate customers do; but at times of high demand, Time-of-Use customers would pay more.
- Customers could take advantage of the Time-of-Use rate to save money by changing the timing of their electricity usage – for example, by running clothes dryers and dishwashers in the evening or on weekends, or by using programmable thermostats to set their air conditioner a couple of degrees higher in the afternoon.

## Time-of-Use Pricing Handout

### What Is "Time-of-Use Pricing?"

EXAMPLE  
Higher-cost, on-peak hours Monday - Friday

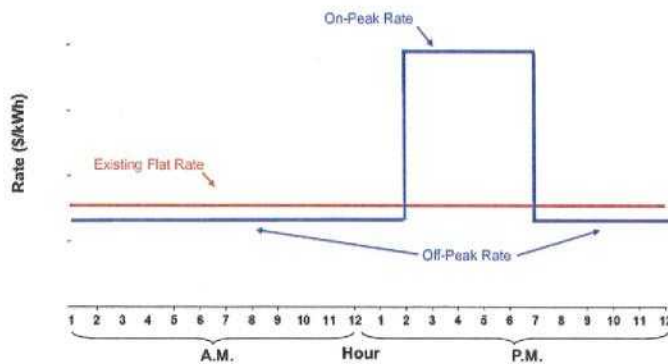


Lower-cost, off-peak hours include weekends, designated holidays and all weekday off-peak hours indicated in the clock above.

## Time-of-Use Pricing Handout Continued

### What Is "Time-of-Use Pricing?"

This illustrative time-of-use rate example consists of a higher price during the peak period and a discounted price during the remaining hours.



## Reaction Written Handout Example

### Reaction to General Time-of-Use Information

Is your **initial** reaction to this idea negative, neutral or positive? (Circle your response below)

Very Negative    Negative    Neutral    Positive    Very Positive

Why do you feel that way?

---

---

Is this something that could benefit you? (Circle your rating below)

No    Neutral/Don't Know    Yes

Why do you feel that way?

---

---

What do you like most about the idea? *Why?*

---

---

What do you like least? Are there any roadblocks that might prevent people from taking advantage of this?

---

---

## Possible Program Concepts Handout

### Possible Program Concepts

- **Time-of-Day** programs that are based on the time of the day that electricity is used. Similar to peak pricing used for air travel, cell phones, hotel stays, etc., time of day electric rates mean that customers would pay lower rates during hours of the day of low electricity demand (off-peak) and higher rates during periods of higher electricity demand (on-peak).
- **Time-of-Week** programs that are based on the day of the week that electricity is used. In these programs customers would pay lower rates during weekends, when electricity demand is lower and higher rates during weekdays (Monday through Friday) when electricity demand is higher.
- **Weekday Reduction Rebate** programs that are based on reducing electricity consumption during weekdays (Monday through Friday). These programs offer incentives to customers in the form of a rebate with the level of rebate determined based on a customer's usage in their current period measured against a like prior period, or "baseline" period. The "baseline" period would be the same period of time, such as a week or month, as the current period. For example, customers may be paid a rebate to reduce their electricity consumption in October 2012 by 10% compared to their electricity consumption in October 2011, the "baseline" month.

## What Is “Peak Time Rebate?”

- When the demand for electricity is highest, such as on very hot summer afternoons, the cost of electricity is driven up and there can also be reliability problems – outages become more likely because the system is “overloaded.”
- In addition, at these times of peak demand, older, less environmentally friendly generation plants must be used to their full capacity to meet customer needs, which results in the emission of additional pollutants and greenhouse gases.
- Utilities can offer customers an opportunity to save money while helping to address these challenges. For example, customers could sign up for a program in which they would agree to reduce their electricity usage for a few hours during a few afternoons each summer, when the utility notifies them that demand is extremely high.
- Participating customers would receive a credit on their bill for reducing consumption when requested, in addition to the savings they would achieve by using less power.

# **Attachment 14**

## **Proposed Tariff Supplement**





# SCHEDULE OF RATES

For Electric Service in Allegheny and Beaver Counties

(For List of Communities Served, see Pages No. 4 and 5)

Issued By

**DUQUESNE LIGHT COMPANY**

411 Seventh Avenue  
Pittsburgh, PA 15219

**Richard Riazzi**  
**President and Chief Executive Officer**

ISSUED: XXXXXX XX, XXXX

EFFECTIVE: June 1, 2012

Issued in compliance with Commission Order dated June 23, 2010, at Docket No. P-2009-2149807.

---

# NOTICE

**THIS TARIFF SUPPLEMENT INTRODUCES A NEW RATE SCHEDULE**

**See Page Two**

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Table of Contents

Sixteenth Revised Page No. 3  
Cancelling Fifteenth Revised Page No. 3

Appendix B — Rate RT – Residential Service Time-of-Day has been placed into the Table of Contents.

Appendix B — Rate RT – Residential Service Time-of-Day

Original Page No. 117  
Original Page No. 118

Per Commission Order dated June 23, 2010, at Docket No. P-2009-2149807, rate schedule Rate RT – Residential Service Time-of-Day is being placed into the Tariff as Appendix B.

TABLE OF CONTENTS

	Page Number
List of Modifications .....	2
Table of Contents .....	3
List of Communities Served .....	4-5
<b>RULES AND REGULATIONS</b> .....	<b>6-31</b>

**RATES:**

RS Residential Service.....	32-33
RH Residential Service Heating.....	34-36
RA Residential Service Add-on Heat Pump .....	37-39
GS/GM General Service Small and Medium.....	40-42A
GMH General Service Medium Heating.....	43-46A
GL General Service Large .....	47-49
GLH General Service Large Heating.....	50-52
L Large Power Service .....	53-56
HVPS High Voltage Power Service .....	57-60
AL Architectural Lighting Service.....	61-63
SE Street Lighting Energy .....	64-67
SM Street Lighting Municipal.....	68-70
SH Street Lighting Highway.....	71-73
UMS Unmetered Service .....	74-75
PAL Private Area Lighting.....	76-78

**STANDARD CONTRACT RIDERS:**

General.....	79
No. 1 Consumer Education Surcharge.....	80-80A
No. 2 Untransformed Service .....	81
No. 3 School and Government Service Discount Period.....	82
No. 4 Budget Billing HUD Finance Multi-Family Housing .....	83
No. 5 Time of Day Discounts .....	84-85
No. 6 Temporary Service .....	86
No. 7 SECA Charge.....	87
No. 8 Default Service Supply.....	88-88C
No. 9 Day-Ahead Hourly Price Service.....	89-93A
No. 10 State Tax Adjustment Surcharge .....	94
No. 11 Street Railway Service .....	95
No. 12 Billing Option - Volunteer Fire Companies and Nonprofit Senior Citizen Centers.....	96
No. 13 General Service Separately Metered Electric Space Heating Service.....	97
No. 14 Residential Service Separately Metered Electric Space and Water Heating .....	98-99
No. 15 Energy Efficiency and Conservation and Demand Response Surcharge .....	100-100C
No. 16 Service to Non-Utility Generating Facilities.....	101-102
No. 17 Emergency Energy Conservation .....	103-104
No. 18 Rates for Purchase of Electric Energy from Customer-Owned Renewable Resources Generating Facilities .....	105
No. 19 Off-Peak Water Heating Service.....	106-107
No. 20 Smart Meter Surcharge .....	108-109B
No. 21 Net Metering Service .....	110-112

**APPENDIX A:**

Transmission Service Charges .....	113-116
------------------------------------	---------

**APPENDIX B:**

Rate RT – Residential Service Time-of-Day .....	117-118
---	---------

(C)

**APPENDIX B**

(C)

**RATE RT - RESIDENTIAL SERVICE TIME-OF-DAY**

(Applicable to Rate Schedules RS, RH and RA)

**AVAILABILITY**

Available only to residential customers who voluntarily enrolled in the Company's Smart Sense Pilot Program as of June 1, 2011, had an Alpha electronic meter installed at their residential premise as of June 1, 2011, and who elected to participate in the Smart Sense Time-of-Day Pilot Program. The Smart Sense Time-of Day Pilot Program is an experimental program to provide customers an opportunity to shift energy usage away from peak periods of electricity demand and evaluate customer response to rates that change throughout the day. The Company's filings and the Commission's Orders at Docket No. P-2009-2149807 provide details about the Smart Sense Pilot Program.

Appendix B shall be effective June 1, 2012, through September 30, 2012, after which it will be terminated.

**MONTHLY RATE****Customer Charge**

The Customer Charge of the participants' applicable Rate Schedule (RS, RH or RA) shall apply.

**Supply**

Effective June 1, 2012, the following supply charges shall be available to participants in the Smart Sense Time-of-Day Pilot Program. The participants must select one of the time-of-day options prior to May 1, 2012. Participants cannot switch options once a selection has been made. Participants who do not make a selection will be placed on the Time-of-Day 1 rate.

	Time-of-Day 1	Time-of-Day 2
On-Peak Period	Weekdays 1 p.m. to 6 p.m.	Weekdays 4 p.m. to 6 p.m.
Off-Peak Period	6 p.m. to 1 p.m. weekdays and all weekend hours*	6 p.m. to 4 p.m. weekdays and all weekend hours*
On-Peak Rate	15.72 cents/kWh	31.44 cents/kWh
Off-Peak Rate	6.13 cents/kWh	5.86 cents/kWh

\*Independence Day (Wednesday, July 4, 2012) and Labor Day (Monday, September 3, 2012) will be considered off-peak all day.

The supply charges of the participants' applicable Rate Schedule (RS, RH or RA) shall apply through May 31, 2012. Effective October 1, 2012, the supply charges of the participants' applicable Rate Schedule (RS, RH or RA) shall apply.

**Distribution**

The Distribution Charge of the participants' applicable Rate Schedule (RS, RH or RA) shall apply.

**Transmission**

The Transmission Charge (Appendix A of this Tariff) of the participants' applicable Rate Schedule (RS, RH or RA) shall apply.

**(C) – Indicates Change**

ISSUED: XXXXXX XX, XXXX

EFFECTIVE: JUNE 1, 2012

---

**APPENDIX B – (Continued)****(C)****RATE RT - RESIDENTIAL SERVICE TIME-OF-DAY – (Continued)**

(Applicable to Rate Schedules RS, RH and RA)

**METERING**

Participants in the Smart Sense Time-of-Day Pilot Program granted the Company permission to install an Alpha electronic meter capable of recording and storing energy consumption in hourly intervals on their home. The Company installed these Alpha meters in the spring of 2011 at no cost to the Pilot Program participants. The Alpha meter shall remain installed until replaced by the Company or at the participants' request.

**LATE PAYMENT CHARGE**

Bills will be calculated on the rates stated herein, and are due and payable on or before twenty days from the date of mailing of the bill to the ratepayer. The bill is overdue when not paid on or before the due date indicated on the bill. An overdue bill is subject to a Late Payment Charge of 1.25% interest per month on the full unpaid and overdue balance of the Company charges on the bill. The Charge shall be calculated on the overdue portions of the Company charges on the bill and shall not be charged against any sum that falls due during a current billing period. A Late Payment Charge on a disputed bill may be reduced or eliminated by the Company, or upon order by the Commission, to facilitate payment by the disputing customer.

**SPECIAL TERMS AND CONDITIONS**

All terms and conditions of the Smart Sense Pilot Program shall apply.

The participants' must remain in the Smart Sense Pilot Program through November 2012.

All other applicable rules and riders of this Tariff shall apply.