

**Baltimore Gas & Electric (BGE)  
Smart Grid Customer Education and Communication  
Plan**

**July 12, 2010**

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# 1 Introduction

BGE's *Smart Grid Customer Education and Communication Plan* outlines the major education and outreach elements for communicating BGE's Smart Grid initiative to customers and key stakeholders. This document does not contain an exhaustive list of all project components; rather, additional elements will be determined as the Smart Grid project deploys. BGE will partner with the PSC and other key stakeholders, forming a Communication Review Team to review communication elements as developed.

BGE's customer communication plan is envisioned to be *long-term, robust, sustained* and *benchmarked* consumer-centric education effort. Specifically, it will be a coordinated, comprehensive education effort that creates a conduit for effective two-way communication to help customers understand how to become "Smart Energy Managers." BGE's overall education approach goes far beyond basic communications to provide:

- Financial incentives to our customers for changing their usage patterns through Smart Energy Pricing
- Proactive feedback to help customers better understand their energy usage and how to save money through several mechanisms including the Smart Energy Manager Web Portal
- New tools, including those on the Smart Energy Manager Web Portal, to help customers understand and manage their energy use
- Comprehensive and consumer-centric communications and marketing to explain the benefits of Smart Grid, set expectations on roll-out activities, and to help customers understand how to take advantage of the new technology

BGE's *Smart Grid Customer Education and Communication Plan*, which will be refined with Commission input, is based upon lessons learned through benchmarking other utility Smart Grid experiences, including such companies as AEP, FPL, PG&E, Oncor, Xcel, Exelon/ComEd, Allegheny, CLP and OGE; research; and, most importantly, BGE's nationally recognized Smart Energy Pricing pilot.

## 2 Background

BGE's Smart Grid Initiative is a landmark project that involves the installation of approximately 2 million advanced electric and gas meters throughout BGE's service territory along with a two-way digital communications network. The initiative establishes Smart Energy Pricing as the standard pricing structure, providing BGE residential customers with rebates for reducing consumption during peak demand periods.

Smart Grid is the continuation of BGE's commitment to transform customer operations and reduce customer costs, peak demand and energy usage. BGE already has many "smart" systems in place, including remote monitoring and control over all substations and most capacitors. BGE has installed "smart" thermostats and air conditioner load control switches for demand response. Additionally there are some automated metering capabilities in place, including the ability to remotely read interval meter data for large Industrial and Commercial (I&C) customers, as well as the ability to read meters using drive-by vans. (See Appendix for examples of program success)

## 3 Communication Approach

### Driving Fundamental Change

#### Assumptions:

To achieve the Maryland PSC's goal of "achieving a fundamental change in the way BGE customers use energy and think about energy pricing," it will be necessary to give consumers a compelling reason to think about their electric usage beyond simply the act of paying their bill. As part of the larger sustainable energy economy, conscious consumption and price incentives that reward responsible behavior become more inspiring.

To affect change, a comprehensive customer education program must define smart grid and its benefits in customer-friendly terms and reflect regional values, gain broad support for BGE's leading-edge vision, encourage participation by an ever increasing number of consumers, help people choose the programs and value-added services that work for them, and enable the utility to provide these services at a fair rate.

Acquiring and developing conscious energy consumers will require a multi-faceted approach that will pay for itself in continued participation in demand reduction programs.

#### The Approach:

BGE's plan will demonstrate for customers the value of Smart Grid, utilizing various channels to reach individual customers in different segments in simple, easily understood language (not utility-speak). BGE's *Smart Grid Customer Education and Communication Plan* is designed to communicate early and often, with a variety of touch points, building upon the communications from prior customer experiences. Multiple communication vehicles will target both internal and external audiences.

BGE's Smart Grid initiative includes four key overlapping phases that require comprehensive customer, employee and stakeholder education and communication. Each customer engagement will reflect strategic messaging and execution tactics that build on the previous phase. The overlapping phases are:

1. *Smart Grid Introduction* (begins immediately upon approval by PSC)

BGE will begin communication with customers prior to technology installation.

Communicating with customers prior to the installation removes the mystery and arms customers with information and a clear understanding of the benefits to come.

2. *Installation of AMI Meters and Two-Way Network Infrastructure*

Phase 2 communications will build upon the foundation established during Phase 1. During Phase 2, BGE will install the two-way network and AMI meters. Customer communication during Phase 2 will provide advanced notification prior to meter installation. Communication focus will be on helping customers understand the installation process and prepare them to take action immediately through an innovative web portal that will position them to become Smart Energy managers as it relates to their individual energy use.

3. *Initiation of Smart Energy Pricing (SEP)*

Phase 3 will build on the success of BGE's Smart Energy Pricing Pilots.

In addition to facilitating a positive customer experience during Phases 1 and 2, BGE plans to make significant investments to increase our customers' understanding of their energy usage, including ways to change their usage to save money while positively impacting our environment. We believe that a true partnership between BGE and our customers offers the best path forward for realizing the full benefits of Smart Grid. Specifically, by providing the tools to conserve energy and earn rebates for reducing their energy use during specific days, BGE customers will have greater control than ever before of their energy usage and spending.

4. Deployment of advanced energy management tools

As technology continues to evolve and new tools become available to customers, specific communication tactics will be designed to educate customers.

## 4 Communications Objectives

1. Define Smart Grid and create awareness of its value and customer benefits now and in the future.
2. Build customer confidence in BGE as an expert and partner in managing energy and reducing energy bills.
3. Educate and engage customers through an interactive consumer education program to help them understand that they have the power to manage energy use and save money while positively impacting the environment.
4. Energize and empower employees / retirees to serve as ambassadors and educators within their local communities.
5. Reinforce BGE's commitment to customers, advanced technology, energy efficiency and conservation, and environmental stewardship.

## 5 Key Messages

### 5.1 High-Level Messages

*(For illustration purposes only – exact messaging to be refined based on customer research)*

- The power is in your hands.
- Smart Grid isn't just about energy. It's about transformation, information and communication.
- Smart Grid will transform the way BGE customers access, manage and conserve energy in their homes and businesses by providing them with timely information via two-way communications system, allowing customers to make important energy decisions and save money
- Knowledge brought to Power – It's our future – the latest advances in digital information technology to enhance reliability, security, efficiency and communication
- The true beneficiaries of this advanced technology will be our customers who, over the life of the project, can expect significant environmental benefits as well as more than **\$2.6 billion** in energy savings and improved system reliability.

### 5.2 Content Messages

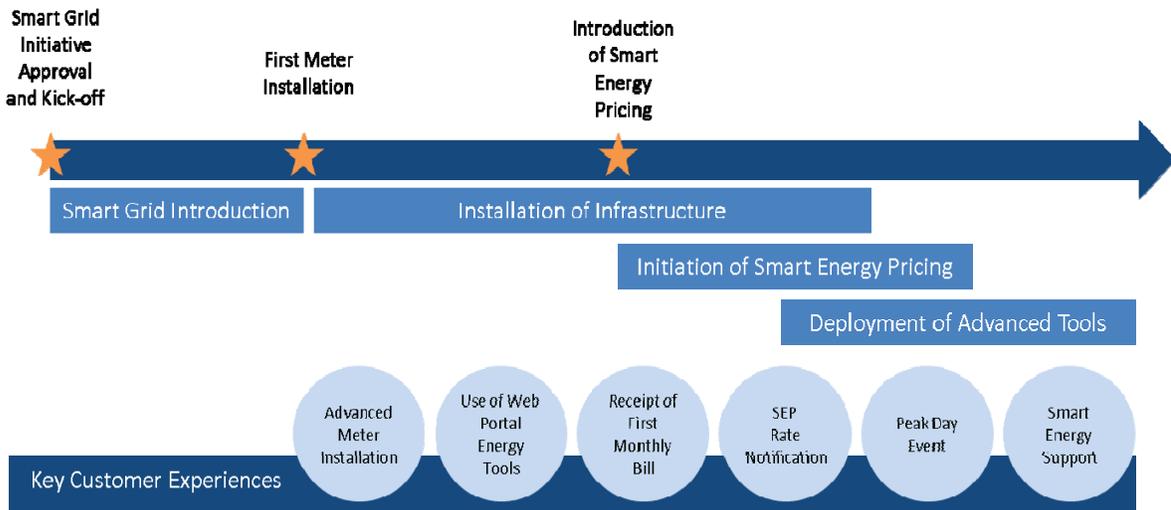
Content messages will provide clear details in the various communication elements. Information is designed to engage, motivate and answer potential questions. Messages include:

- What is Smart Grid
- Why is Smart Grid important
- Who benefits, how and why
- What are Peak Time Rebates and how to maximize them
- Available tools and how to use the tools to maximize savings
- The meter installation process and timeline
  - BGE's role and responsibility
  - The customer's role and responsibility
- Technology-specific information that addresses accuracy and security (lessons learned from other utilities will prove beneficial to this specific aspect of messages)

## 6 Communication Timeline

BGE's Smart Grid Initiative is a multi-year initiative that will enable significant changes in the customers' relationship with their energy use. The communications plan is being structured around overlapping phases intended to build awareness and interest in active participation.

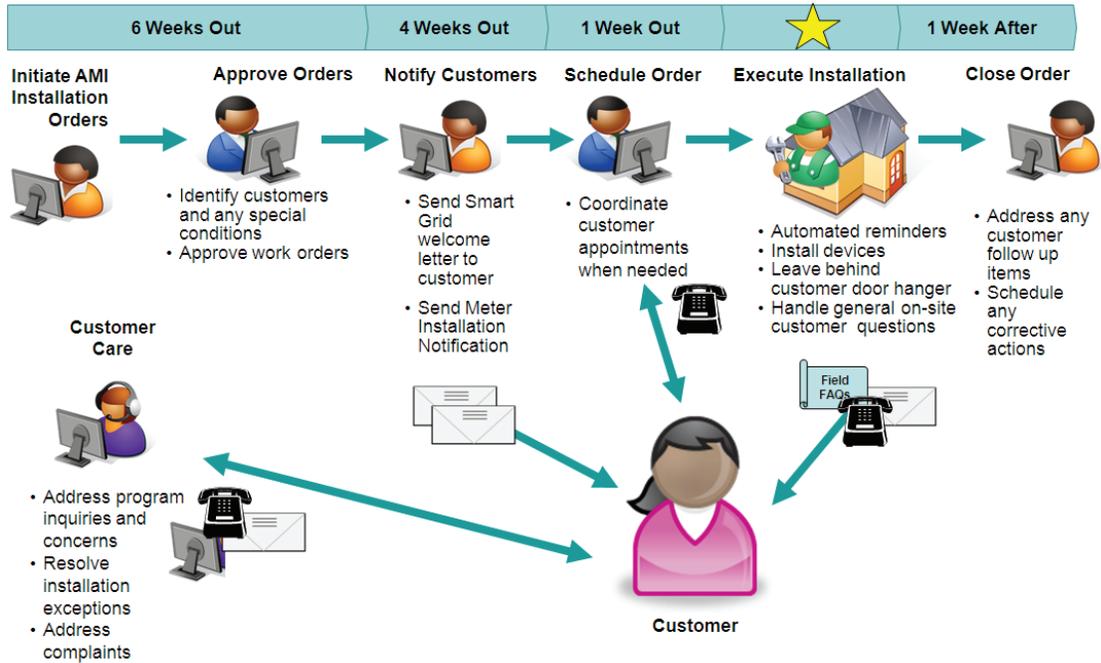
Early outreach includes communication from the time the Smart Grid is introduced and the installation of the infrastructure. The focus of communications will be to build awareness of Smart Grid and the program, to associate the Smart Grid with key motivators for our customers (e.g., saving money), and set expectations about the deployment of technology.



Once infrastructure installation begins and up through the introduction of Smart Energy Pricing, the communication focus will be on setting detailed consumer expectations about the meter installation process and providing support to customers as they begin to receive bills based upon the new meters

Communication will expand with the initiation of the Smart Energy Pricing program to foster customer understanding of the rebate program and the tangible benefits, enhancing the way they use energy.

It is important to note, the installation of the Smart Meter infrastructure will include several touch points with the customer. Below is a diagram that describes how the meter installation process will involve the customer:



## 7 Key Stakeholders/Audience

**Primary Stakeholders/ Audiences:** BGE residential customers – all segments

**Secondary Stakeholders/Audiences:**

- Maryland opinion and community leaders
- Legislators – local, state and federal
- Regulators – state and federal
- Employees
- Retirees
- Media
- NGO's (e.g., AARP)
- Other interested parties

BGE will also partner with the PSC and other key stakeholders to form a stakeholder review team to review communications as refined throughout the initiative.

## 8 Research

***“We thought we were undertaking an infrastructure project but it turned out to be a customer project” - Chris Johns, President, PG&E***

Research, including benchmarking and lessons learned from other utilities’ Smart Grid initiatives serves as the backbone for this ongoing education program. Research will be ongoing to ensure the effectiveness of communication tactics and messages. Research methods will include benchmarking; focus group testing; online, phone, contact center and awareness surveys; and social landscape monitors. The findings of those surveys will be made available in a transparent fashion without hesitation or manipulation.

### 8.1 Customer Awareness

BGE’s Smart Grid Customer Communication and Education Plan is structured to address the customer awareness gap identified through research. Current research provides a baseline to build the plan and customer awareness. On-going research will monitor awareness, perceptions and be used to refine the plan.

National surveys indicate that customer awareness of the smart grid is quite low. And they further indicate that customers who are aware of the smart grid tend to have a very favorable opinion of their utilities if they are engaged in the smart grid. National surveys also indicate that customers are very interested in learning more about smart grid pricing. In fact, GE indicates that 3 of 5 customers have expressed such interest.

Of those who have expressed an interest in having their utility pursue the smart grid, a very large number (4 of 5) have expressed interest because they want to save money on their utility bills. Other reasons in descending order of importance include having better control over their energy choices, doing something good for their children and grandchildren, and doing something good for the environment.

#### **JD Power 2010 Residential Electric Customer Satisfaction Study**

The 2010 JD Power Residential Electric Customer Satisfaction Study provides customer feedback from 121 electric utilities nationwide. Under the Smart Grid/Smart Meter Awareness section of the study, JD Power also gathered nationwide customer feedback on their familiarity with their utility being currently involved in or planning to be involved in a Smart Grid/Smart Meter deployment. The following are the Smart Grid/Smart Meter data results:

1. How Familiar Are You With The Term “Smart Grid”?

<u>Not At All Familiar:</u>	Industry: 74%	BGE: 66%
<u>Somewhat Familiar:</u>	Industry: 24%	BGE: 31%
<u>Very Familiar:</u>	Industry: 2%	BGE: 3%

2. How Familiar Are You With the Term “Smart Meter”?

<u>Not At All Familiar:</u>	Industry: 76%	BGE: 63%
<u>Somewhat Familiar:</u>	Industry: 21%	BGE: 32%
<u>Very Familiar:</u>	Industry: 3%	BGE: 5%

3. Are You Aware Of Any Efforts Your Utility Has Made To Implement Smart Grid or Smart Meter Technologies?

<u>Not Aware Of Any Efforts:</u>	Industry: 86%	BGE: 75%
<u>Yes – Both:</u>	Industry: 4%	BGE: 10%
<u>Yes – Smart Meter:</u>	Industry: 7%	BGE: 12%
<u>Yes – Smart Grid:</u>	Industry: 2%	BGE: 3%

4. Are You Aware Of Any Efforts Your Utility Has Made To Implement Smart Grid and/or Smart Meter Technologies? Utilities With The Most Awareness By their Customers?

- Pacific Gas & Electric:	47%	
- Austin Energy:	37%	
- Sacramento Municipal Utility District (SMUD):	36%	
- Portland General Electric:	36%	
- Jackson EMC:	29%	
- Idaho Power:	28%	
- San Diego Gas & Electric:		28%
- Salt River Project:	27%	
- <b>BGE:</b>		<b>25%</b>
- Colorado Springs Utilities	25%	
- Georgia Power:	22%	
- EPB:		21%
- Alabama Power:	21%	

**General Electric Company**

The survey released by General Electric Co. on March 23, 2010, found that 79% of American consumers are not familiar with the term "smart grid." A mere 4% of U.S. consumers surveyed said they are very familiar with the term "smart grid" and 17% said they are somewhat familiar with it, according to the survey.

Nearly 70% of those who said they were familiar with the term, however, still did not know whether their homes are connected to a smart grid.

**BGE's Residential Smart Grid Awareness Study**

Worthy of mention is the fact that BGE already conducted research prior to the PSC issuing its order, to gain baseline insights as to the customer awareness, perceptions and understanding of Smart Grid (*attached*). Overall familiarity with the Smart Grid and the Smart Meter, along with what each does is very low among BGE customers. Key findings of the survey include:

- Overall familiarity with the Smart Grid and the Smart Meter, along with what they do, is very low. However, slightly more survey participants were familiar with the Smart Meter than they were with the Smart Grid.
- The majority of customers, 56 percent, are 'not at all familiar' with the Smart Meter and what it does
- The research revealed that 76 percent are 'not aware' of any initiative by BGE regarding Smart Meters or Smart Grids.

- Many customers believe that the Smart Grid controls energy usage by cycling it on and off according to peak demand times and redirecting the flow of energy according to where the need is greatest. Further, they also believe that the Smart Meter regulates/controls energy usage as well as tracks/monitors usage as well.
- Three quarters of respondents stated that they are not aware of any initiative by BGE regarding Smart Meters or Smart Grids.
- With regard to finding it valuable to see how much gas and electricity they are using every day, the majority of respondents:
  - Forty-five percent (45 percent) 'Agree' it would be valuable
  - Thirty-two percent (32 percent) of survey participants 'Strongly Agree' that they would be more likely to reduce their gas and electricity usage if they could see how much they used.

## 8.2 Benchmarking and Lessons Learned

### 2008 Smart Energy Pricing (SEP) Post-Pilot Program

BGE's *Smart Grid Customer Education and Communication Plan* will also be informed by prior pilot experience including Smart Energy Pricing pilots conducted during 2008 and 2009. High level findings follow:

- SEP program participants were overwhelmingly satisfied with their program experience with over 93 percent reporting that they were either 'very satisfied' (62 percent) or 'satisfied' (31 percent). The mean satisfaction score was 4.5 on the 1 to 5 scale.
- Peak Time Rebate customers had slightly higher satisfaction levels than did Dynamic Peak Pricing customers.
- Saving money was the primary motivation for program participation, cited by 78 percent of respondents.
- Ninety-seven percent of participants would be interested in continuing the same pricing structure in 2009.
- Over 78 percent of respondents believe that variable rate programs should be standard for all BGE customers.
- Sixty-five percent of participants considered voicemail to be the most effective notification technique.

### 2009 Smart Energy Pricing (SEP) Post-Pilot Program

- The potential to save money on monthly utility bills continues to be the primary motivation behind customers' participation in the Smart Energy Pricing Pilot (84 percent in 2009 as compared to 78 percent in 2008).
- Satisfaction with the SEP Pilot Program remained consistently high, with two thirds of the participants (63 percent in 2009 and 62 percent in 2008) claiming to be 'Very Satisfied' with the pilot program, and nine out of ten participants stating they are at least 'Satisfied' (92 percent in 2009 and 93 percent in 2008).

- Comfort levels during Critical Peak Days also remained consistent, with 24 percent of 2009 program pilot participants stating themselves to have been ‘Very Comfortable’ as compared to 22 percent in 2008, and 71 percent stating they were at least ‘Comfortable’ in 2009 as compared to 74 percent in 2008.
- Participants in each year’s SEP Pilot Program – 99 percent in 2009 and 98 percent in 2008 – were overwhelmingly interested in returning to a similar pricing structure the following summer.
- Respondents also believe that the ability to save and earn rebates should be standard for all BGE customers.
- Eighty percent (80 percent) of 2009 SEP Pilot Program study participants stated they also adjusted their energy use during critical hours of Non-Critical Peak summer days.
- The top two changes in electric use made by 2009 SEP Post Pilot Program participants were that they *refrained from using high energy appliances during critical peak periods* (66 percent in 2009 and 65 percent in 2008), and they *raised temperature setting or turned off air conditioning/heat pump during critical peak periods* (60 percent in 2009 as compared to 54 percent in 2008).
- The majority of 2009 SEP Pilot Program participants found the hands-off features of the thermostat most useful, including *having the ability to program temperature settings* (64 percent of cases) and *having the thermostat automatically cycle the compressor* (56 percent of cases).

#### **OG&E Case Study**

- 765,000 customers
- Silver Spring Network (SSN) infrastructure including ZigBee-enabled meters, Demand Response, and Web Portal
- SSN-certified HAN devices (Thermostat and In-Home Display)
- Time of Use (TOU) and Variable Peak (VPP) with Critical Peak Pricing (CPP)
- Four pricing levels from \$0.03/kWh to \$0.46/kWh
- Pilot expanded to 3K customers in summer of 2010

#### **Findings**

- Energy awareness leads to savings and peak shifting capabilities
- 92 percent of customers would shift to off-peak consumption given incentive
- 10 percent-15 percent monthly energy bill savings over flat rate with technologies

#### **Extensive Industry Interviews and Evaluation**

In addition to formal research, BGE representatives interviewed utility representatives, public relations firms, marketing organizations and industry leaders with Smart Grid experience to identify best practices, challenges and issues. An overwhelming response was “Communicate early and often.”

The references below and examples in the attached Appendix reflect communications developed based on best practices and lessons learned. These resources are examples of those that will be used to develop BGE’s customer education elements in the Customer Tactics section of this plan

- [http://www.oncor.com/tech\\_reliable/smarttexas/default.aspx](http://www.oncor.com/tech_reliable/smarttexas/default.aspx)
- <http://www.duke-energy.com/about-us/smart-grid.asp>
- <http://www.smartgrid.epri.com/>
- <http://www.pge.com/smartmeter/>
- <https://www.pge-smartrate.com/index.cfm>
- [http://www.oge.com/residential-customers/products-and-services/Pages/Smart percent20Grid.aspx](http://www.oge.com/residential-customers/products-and-services/Pages/Smart_percent20Grid.aspx)
- <http://www.itsyoursmartgrid.com/>
- [http://ge.ecomagination.com/smartgrid/#/landing\\_page](http://ge.ecomagination.com/smartgrid/#/landing_page)

### 8.3 Customer Segmentation for Dynamic Pricing Communication

BGE recognizes the rich diversity within our customer base, and the associated variety of motivating factors that affect energy usage and engagement in programs such as dynamic pricing. Customers will opt to change their energy usage in response to price signals according to their personal choices and beliefs. Segmenting customers into groups with similar beliefs and tendencies will allow BGE to better craft messages that will resonate with each group. BGE’s research plan will consider groups such as (1) green / environmentally oriented, (2) control / technology oriented, (3) bargain / budget value seeker, (4) comfort over cost, (5) privacy is paramount, (6) survival / cost management is essential.

CONSUMER SEGMENTS	
<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-right: 5px;">E C O</div> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;">BARGAIN HUNTERS</div> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;">GREEN ALTRUISTS</div> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;">DIGITAL CONTROL ENTHUSIASTS</div> </div> <div style="text-align: center; margin-top: 10px;">  </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px;">PRIVACY RESISTERS</div> <div style="border: 1px solid black; padding: 5px;">COMFORT LOVERS</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <span>\$</span> <span>\$\$\$</span> </div>	<p>Completed high school. People in apartments relate differently to the utility bill than home owners and so on. Multiple research studies show that <b>green</b> altruists and digital <b>control</b> enthusiasts will likely be early adopters and be willing to invest in clean solutions. <b>Bargain</b> hunters will respond to pricing incentives that allow them to save. <b>Comfort</b> lovers will probably not bother to respond to PTR unless enabling technology takes the guess work and pain out of participation. <b>Privacy</b> resisters—fearful of intrusion—will focus on data safeguards which can be solved with proper data demarcation within the meters. Customers with medical conditions who depend on uninterrupted service for <b>survival</b> may need to be discouraged from responding.</p>
<p>Customers in different segments have different energy needs and are likely to value the PTR program differently. The retired elderly couple has very different needs than the young couple with no kids. College educated people perceive the need for conservation differently than those who have just</p>	

**Peak Time Rebate Segmentation Example**

Applying research, detailed activities will be designed to meet customer segment needs. The chart below illustrates a potential example of customer segmentation for Peak Time Rebates.

Segment	Awareness	Critical Interest	Specialized Channels
Green	HIGH Voluntary load shift possible with info and simple feedback devices	protecting environment, lowering carbon footprint	Local environmental non-profits, energy audit and weatherization consultants, green events  This is a key target to become smart energy champions themselves
Control	HIGH. Early adopter of tools that take advantage of up to minute feedback	Actively managing usage is a game as well as environmentally sound idea	Web Portals
Bargain	MODERATE Worried if smart grid will add cost	Keeping costs down	Energy audit and weatherization non-profits and service providers, home shows
Comfort	LOW, not likely to be early players	Easy, not having to pay attention	Purveyors of automated solutions, Smart appliance makers, high touch service companies
Privacy	LOW, not likely to be early players	Keeping personal data out of utility hands	Radio shows and town meetings, Do-it-yourself home improvement retailers and shows
Survival	MODERATE Worried if smart grid will add cost	More likely to actively participate if they see cost, community benefits	Community-based organizations like greendmv.org and BGE's low income programs

## The Impact of Dynamic Pricing and Low Income Customers

The core finding is that low income customers are responsive to dynamic rates and that many such customers can benefit even without shifting load.

Contrary to the arguments about the inability of low income customers to respond to price signals, the results of the survey show that low income customers do shift their load in response to price signals. The results show that a customer's income status did not have a measurable effect on their elasticity of substitution. More explicitly, these results show that the elasticity of substitution of low income customers is not statistically different from that of other higher income customers whose income data is known.

## 9 Employee Communication and Education

We now recognize that the process of educating BGE customers regarding Smart Grid will need to begin with internal alignment as many of our own employees who may not yet understand how this cultural shift will affect them, much less their customers.

Continuing to educate BGE employees regarding Smart Grid, specifically how the technology works and the value proposition of the new technology for the utility's 1.2 million customers is an essential component of the initiative's success. That education, in turn, will equip BGE employees to act as company ambassadors or liaisons when interacting with customers, family, friends, neighbors, etc. – a role that most BGE employees are willing and eager to take on.

Due to their roles within the company, many BGE employees interact with customers on a daily basis. Employees want to feel they have the ability and skill to successfully answer customers' questions and provide assistance about where to find more information.

The following internal communication initiatives (which are provided for illustration and are by no means considered exhaustive) will help employees understand how Smart Grid technology works and provide them with key messages for use with customers and other stakeholders.

### President's Message

Letter from BGE President Ken DeFontes which announces Smart Grid approval, outlines key dates and deliverables, and explains the need for employees to play an active role as company ambassadors in support of the program. The letter will include a link to more information on the company's intranet site, Powernet, as well as [www.BGE.com](http://www.BGE.com).

- Concise, succinct message points on the company's intranet will provide employees with an overview of Smart Grid's key components as well as FAQ's and other real-time tools and information with which to effectively engage BGE's customers.

### Video Message Featuring Ken DeFontes and Mark Case

Following the approval, BGE President Ken DeFontes and Mark Case, senior vice president of strategic and regulatory affairs, will be featured in a video discussing all the key components of Smart Grid. The video will be featured on the Constellation Energy intranet site, MyConstellation for all employees to view.

- Leaders of field employees (who do not have regular access to a computer) will be asked to view the video with employees during morning briefings.

**Job Aid Web Tutorial**

For employees who want more in-depth information, a Smart Grid tutorial – an online job aid that takes them step-by-step through the history of Smart Grid all the way through the approval process and what is expected when installations begin will be available.

**Town Hall Briefings**

Members of BGE's Executive Leadership Team (ELT) will host regular Smart Grid meetings at each of BGE's primary locations, including the Gas & Electric Building, the Rutherford Business Complex, Front Street, Spring Gardens, and each of the service centers. This will give employees the opportunity to hear the messages first-hand and to ask questions of BGE's top leadership.

**Executive Blog**

A new executive blog will be developed with input developed and provided by BGE's executive leadership team (ELT). Topics of the first several blogs will be focused on the value proposition that is Smart Grid, why it's so critical to customers, the timing of the rollout, etc. The messages will be short and written in a conversational style. The blog will allow employees to write comments or ask questions about the topic.

**Fact Cards**

Many BGE field employees do not have regular access to a company computer. Laminated fact cards will be provided to every employee – with a concentration on the field force. The Smart Grid message points will be short, to-the-point and easy to communicate to customers.

**Customer Leave-Behind**

A customer communications pamphlet will be created that includes the benefits of Smart Grid, the timing, what customers can expect and when, etc. Field employees may distribute this literature to customer with whom they come in contact. The information will lead customers to more information on Smart Grid on bge.com.

Retirees will be provided the same information as active employees. Additionally, employee education will be ongoing – not just something that occurs during the initial phase but throughout the life of the project.

**10 Customer Communication Tactics**

The customer communication tactics listed below are based on research including BGE pilot programs and incorporating lessons learned from other utility deployments. The communication and education plan is designed to be flexible to optimize each customer's individual experience.

BGE will be employing a multi-channel strategy for interacting with customers. By providing consistent messaging and tools across a broad set of communication channels, we expect to significantly enhance our customers' experiences by communicating with them in the way they choose and in which they are most comfortable. For example, we plan to proactively notify our customers prior to Critical Peak Periods to support them in maximizing their Smart Energy Pricing rebates. We plan to capture our customers' preferences and provide the notifications in the way that they choose, whether that is through an e-mail, text message, or phone call. Alternatively, a customer may choose to simply check our web-site themselves or rely on television and radio advertisements announcing the events. This multi-channel approach is not only expected to drive customer satisfaction, it is also a key component of our strategy to extend the benefits of Smart Grid to all of our customers. As one example, for a customer who may not have regular access to a computer with internet access, we will also provide energy usage feedback through mobile devices and paper reports.

While we are excited about offering our customers a choice in how they communicate with us, we also realize that it will not be feasible to always get direct feedback from our customers about their preferences, interests, and motivations. For this reason, we also plan to implement customer segmentation initiatives to better target our messaging and more effectively select marketing tactics.

Tactics will be measured for success and continuously fine-tuned.

**Advertising and Mass Media**

Traditional mass media such as TV, radio, print, etc. will create awareness and direct customers and stakeholders to the new Smart Grid micro site for more information. Mass media outreach will include paid advertising (commercials, sponsorships etc.) as well as non-paid public relations outreach (press releases, news interviews, letters to editors, OpEd, etc.).

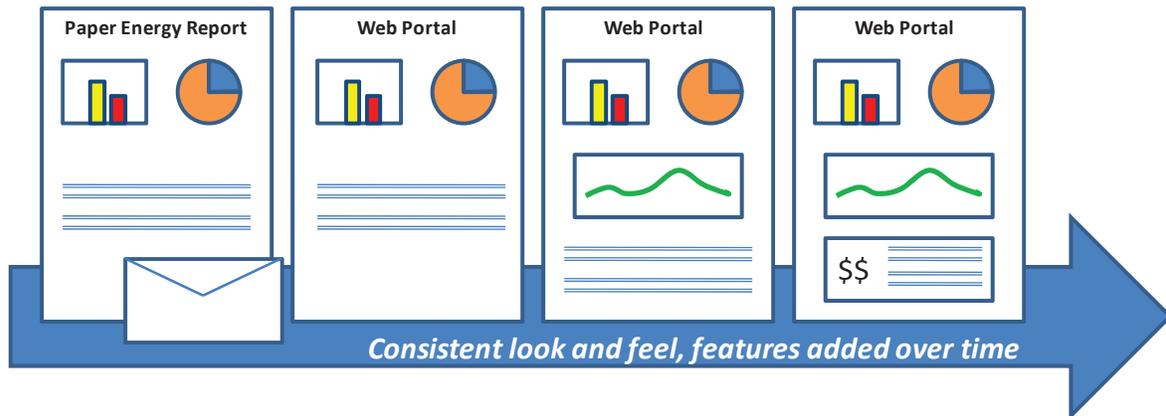
Seek potential partnership with another well-respected brand, such as is the case with the PeakRewards<sup>SM</sup> partnership with the Baltimore Ravens. Perhaps there might be opportunities to enlist the support of certain personalities espousing the value of Smart Grid.

BGE also plans to notify customers of Smart Energy Pricing peak events through mass media.

**Electronic Communication:**

**Web Portal**

A web portal (see appendix for examples) will allow customers to begin to experience the benefits of the smart grid soon after their new meter is installed. This portal is expected to evolve over time with more features being added at key points in the program such as when Smart Energy Pricing is introduced. As new features are added, we believe it is important to maintain a consistent “look and feel” where possible



This portal will provide features such as:

- Usage and “Bill” Data Presentment – presentation of consumption data collected through the AMI system and bill estimates
- Energy Budget Tracking – a tool that allows customers to set a budget for their energy costs and track performance against it throughout the month
- Usage Disaggregation – an analytical tool that breaks down a customer’s usage by major category to help identify savings opportunities

- Savings Summaries – feedback on the amount of money that a customer has saved through Smart Energy Pricing
- Environmental Impact Analysis – an analytical tool that estimates a customer’s carbon footprint
- Comparison to Others – feedback on how a customer’s usage compares with similar households. Social norms have been shown to significantly change consumer behavior.

The portal will evolve over time with more features being added. The portal is one of the primary ways that customers will receive feedback on their energy use, but similar information will also be provided through other channels for customers without portal access. To ensure customers find the Web Portal beneficial, a User’s Guide will be developed and distributed.

### **Social Media**

Social media will enable BGE to communicate via text and multimedia, receive instant feedback, and will provide a means for customers to communicate with one another. Social media engagement has already begun in earnest at BGE and is envisioned to expand with Smart Grid approval. Without question, social media provides BGE and its customers a unique and meaningful means for interacting with each other throughout each phase of Smart Grid implementation.

Before technology installation begins, customers and stakeholders will learn about Smart Grid – i.e., “What is Smart Grid,” “What are the benefits to the customer,” “Why is there a need for an enhanced system,” and more. Answering potential questions will create a greater level of understanding and comfort for the customer. BGE’s Smart Grid blog will encourage two-way communication and customer interaction.

As collateral materials are produced, digital versions will be available on bge.com. Timely messages, along with summaries and links, will be available to those who follow BGE on Twitter and Facebook as well as other social media venues including blogs, etc.

Implementing social media monitoring tools such as Radian 6 will allow BGE to gain active insight into what is being said by customers about the programs and the Smart Grid. Armed with customer feedback, BGE will be positioned to address questions and enhance education based on customer priorities and understanding of the customer voice.

### **Digital Media**

With a positive decision by the PSC, immediately enhance bge.com with a Smart Grid *Envision Center* Micro site. (Example, <http://www.duke-energy.com/about-us/smart-grid.asp> [http://www.oncor.com/tech\\_reliable/smarttexas/smartgrid.aspx](http://www.oncor.com/tech_reliable/smarttexas/smartgrid.aspx) )

BGE’s interactive website including the “How it Works” video will answer questions and provide information about the benefits, installation process and installation schedule similar to Oncor’s site at [http://www.oncor.com/tech\\_reliable/smarttexas/deployment.aspx](http://www.oncor.com/tech_reliable/smarttexas/deployment.aspx).

Also, the following link, while not Smart Grid-related, is an example of videos that we envision creating in order to aid customer understanding, awareness and acceptance of Smart Grid: <http://www.youtube.com/watch?v=g5PF75NVXk0>. Additional viral videos are envisioned (e.g., “10 Steps to becoming an energy superstar”) in order to help build momentum for Smart Grid.

A running count ticker will display a weekly account of how many installations have occurred to date and a map that shows where installations have occurred and where they are planned. This type of information will prove essential for ensuring customer awareness at every step of the Smart Grid value chain.

**Email and SMS**

Initiate an opt-in email campaign in which BGE can regularly interact with customers about developments related to Smart Grid. Customers will also be given the option to choose e-mail or SMS text messaging as their preferred way to receive on-going operational communications from BGE. For example, a customer may choose to receive notifications of Smart Energy Pricing events through e-mail.

**Electronic Newsroom**

Create an online newsroom for media to access news and information leveraging existing and newly-developed materials. This could include downloadable video for media to download as well as other tactics common to online newsrooms.

**Webinars**

Beginning with approval, BGE will host webinars (similar to what many financial-related companies such as T. Rowe Price and USAA conduct for their customers relative to new and existing products) for customers, community groups and other audiences on Smart Grid's processes and the multiple customer benefits.

**Customer Tool Kit**

The customer tool kit will be provided electronically on BGE's Smart Grid micro-site to include online brochures. A hard-copy version will be available by mail, particularly for certain customer segments, especially senior citizens and limited income. Customers will have the option to receive an electronic version of the Tool Kit, which will focus on immediate customer benefits, directions on how to read the meter, how to track energy use, tips to manage and reduce energy use, as well as a wealth of other meaningful information. It is envisioned that the electronic tool kit will be a living vehicle, updated regularly as the program evolves. The hard copy tool kit also will be updated regularly and provided to customers in a similar fashion as BGE's consumer reference manual.

**Video and Photo Slide Show**

A Smart Grid video will illustrate what smart grid is, the components, how it works and customer benefits. (Example How it Works video:

[http://www.silverspringnet.com/resources/collateral\\_flash\\_demo-eng.html](http://www.silverspringnet.com/resources/collateral_flash_demo-eng.html))

**Customer Testimonials**

Customer interviews and testimonies during installation will capture personal customer experiences and will be posted on bge.com's Smart Grid micro-site.

**Mobile Demos**

Mobile demos will include demonstrations about how to read the new meter, how to track energy use, etc., and how to use the new web portal.

**Collateral Materials (Hard Copy communication)****Customer Welcome Kit**

A customer "Welcome Kit" will be distributed after their new meter is installed. The kit will outline benefits and provide information to encourage customers to begin the transformation to smart energy managers.

**FAQ's**

Frequently asked questions will be available on BGE's Smart Grid micro-site. A hard-copy version will be available by request.

To help customers understand the steps of the meter installation process and how to take advantage of the technology, a variety of materials will be prepared to address each step

- Customer letters and an outbound IVR caller will notify customers when we will be working in their neighborhoods.
- Door hangers will be left at the customer's home before and after installation. Information will include how to read the meter, how to track energy use, immediate benefits, and where to get more information.
- A welcome kit will be mailed following installation to provide details and remind customers of the immediate benefits.

**Customer Feedback Mechanisms**

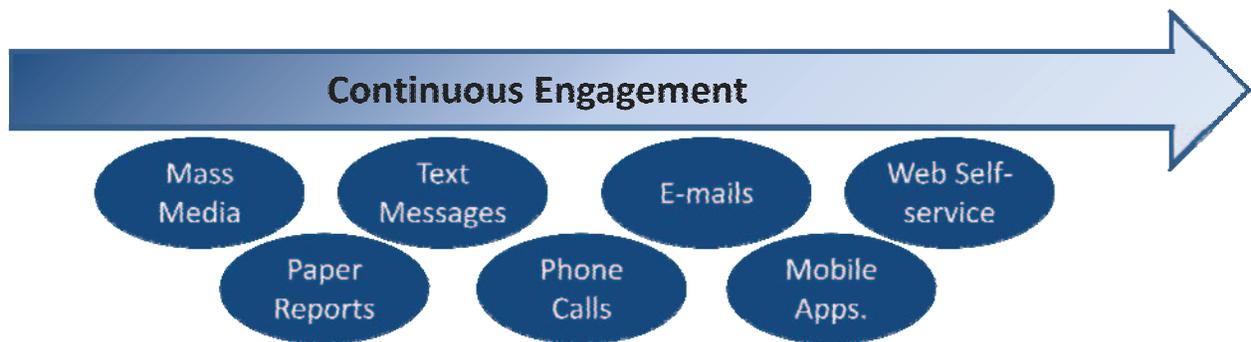
Customers will receive feedback on their energy usage in a variety of forms, including:

- Paper Reports
- Web Portal
- E-mails
- Text Messages
- Mobile Devices

This feedback will go beyond simply presenting AMI consumption data. Other examples of feedback that we expect to provide to customers include:

- Summaries of how much a customer was able to save through participation in Smart Energy Pricing
- Comparison of energy usage to similar households
- Comparison of energy usage to budget targets set by the customer
- Assessment of a customer's environmental impact

BGE's Smart Grid Customer Communication Plan is extremely proactive at each phase, recognizing customer engagement is a continuous process. Over time, as our customers' understanding of and interest in their energy management grows, we expect them to explore the more advanced tools and information that we make available.



**Incentives and Peak Event Alerts**

Smart Energy Pricing will be offered to provide financial incentives for customers to change how they use energy. Peak-time rebates will be offered to all residential customers.

The table below is an example of the key communications planned to provide customers information in association with Smart Energy Pricing events.

<b>Audience</b>	<b>Message Content</b>	<b>Timing</b>	<b>Media/Channel</b>
Residential customers	<ul style="list-style-type: none"> <li>Notification that a Critical Peak Period will be occurring</li> </ul>	The day prior to the Critical Peak Period	<ul style="list-style-type: none"> <li>Television</li> <li>Radio</li> <li>Newspapers</li> <li>Automated phone calls</li> <li>E-mails</li> <li>Text messages</li> <li>Messages on web portal</li> <li>Mobile apps.</li> <li>Social networking sites</li> </ul>
Residential customers	<ul style="list-style-type: none"> <li>Report of how much of a rebate the customer was able to earn during Critical Peak Period</li> <li>Comparison of savings to similar customers</li> </ul>	Soon after event	<ul style="list-style-type: none"> <li>Paper reports</li> <li>E-mails</li> <li>Text messages</li> <li>Web portal</li> </ul>
Residential customers	<ul style="list-style-type: none"> <li>Summary of energy savings due participation in Critical Peak Events over time</li> <li>Comparison of savings to similar customers</li> <li>Reminders of ways that customers can reduce their usage during Critical Peak Periods to increase their rebates</li> </ul>	Monthly during the summer	<ul style="list-style-type: none"> <li>Paper reports</li> <li>E-mails</li> <li>Web portal</li> </ul>

**Employees as Ambassadors and Liaisons**

Employees will be proactive and reach out to family, friends and neighbors. Employees will be trained and prepared with fact sheets and fact cards so that they may respond to questions. A customer communications pamphlet will be created that includes the benefits of Smart Grid, the timing, what customers can expect and when, etc. Employees may distribute this literature to customer with whom they come into contact. The information will lead customers to more information on Smart Grid on bge.com.

**Community Outreach and Limited Income Outreach**

To effectively raise consumer awareness, it is important to engage key influencers as well as members of the public. This goes beyond simple, reactive PR programs typical in the industry. While there is a tremendous amount of anticipation and noise about the Smart Grid, there is also considerable confusion, ambiguity, angst and doubt.

Nationally, the lack of comprehensive consumer education has created a vacuum. Focusing on isolated issues without showing the value of the integrated story distorts the value proposition of the Smart Grid. Bringing our different constituents to the table for honest exchanges of concerns and long-term realities of deployment is critical to building smart energy champions throughout our region.

Using BGE's existing community outreach organization, BGE will be aggressive in its engagement of the customer-at-large through community organizations, NGO's, etc, often piggybacking on existing events where possible. By being active listeners, BGE will have the opportunity to listen to the concerns and capabilities of these groups. BGE can leverage their relationships with their members (who can become influential early adopters). [www.greendmv.org](http://www.greendmv.org) is an example of an interesting regional program that brings together jobs, environmental advocacy, and empowerment of low-income communities.

For outreach to be effective the tone and information must be:

- Educational without being patronizing or condescending
- Engaging and entertaining
- Authentic and realistic
- Technically accurate
- Independently validated
- Realistic and timely when giving calls to action
- Able to deliver multiple impressions through varied channels
- Proactive in seeking opportunities to meet with community groups, neighborhood associations, churches, chambers of commerce, etc. to provide information, demonstrate benefits and answer questions.
- Able to engage schools throughout the service territory to further involve families. For example, Fresno State in California's Central Valley has developed a program that involves students in voluntary Demand Response emergency programs that could be replicated in a very fun and clever local program.

### **Listening Program**

BGE will actively and visibly solicit input from the community, which in and of itself, will have an emotionally powerful effect. More importantly, the company will learn from its consumers. Town Hall-style meetings with electronic voting can give a snapshot of public opinion. Consumer advocacy groups from within the service area as well as some from outside the service area need to be brought into the process so that the legitimate issues they raise can be addressed and considered

### **Public Libraries, Shopping Malls and other key venues**

Host seminars and special events for a wide audience at convenient locations.

### **Speakers Bureau Presentations**

BGE speakers will be available for presentations to groups such as AARP, limited income organizations, etc. to explain Smart Grid and how customers can immediately benefit.

### **Home Energy Management Seminars**

Investigate opportunities to conduct energy management workshops/seminars in conjunction with retailers like Home Depot or Lowes – seek partnerships similar to what exist today under BGE's Smart Energy Savers programs <http://conservation.bgesmartenergy.com/residential/lighting-appliances>.

**SocialCRM -**

Evaluate the use of an online community platform tool such as Lithium ([www.lithium.com](http://www.lithium.com)) to create a powerful online community where customers can share information and experiences, providing real-time feedback to BGE that would alert the utility to both positive and negative trends that are emerging within the customer environment]

Another tactic might include the use of a product-neutral demo station at local home shows and booth at trade shows to be staffed by identified employees or contractors to answer questions

**11 Media Outreach****Press Releases**

Press releases throughout the initiative to highlight key milestones

**Talk Show/Broadcast Opportunities**

Create additional opportunities for designated spokespeople to appear on local TV and radio shows, to communicate about the importance Smart Grid, the process and what customers should expect.

WBAL-AM  
WBAL-TV  
WJZ  
WBFF  
WMAR

**Publications**

Outreach to strategic publications for interviews and articles

Baltimore Sun  
BBJ  
Daily record  
Capital  
Washington Post  
Patuxent Papers (Catonsville Times, Owings Mills Times, Howard County Times, Towson Times, Jeffersonian, etc)

**Media Opportunities**

- Highlight opportunities of interest such as a day in the life of a smart meter from the time it arrives at BGE, to the rigorous testing of various components to installation
- Training class of installers
- First installation of the new meter
  - Similar opportunities for local papers with customers in their specific jurisdictions

**Potential Feature Pitches**

- Develop feature pieces regarding the benefits of Smart Grid, what to expect and customer tools
- Work with radio TV, and web-based programs and others to provide them quality content and resources

### **Editorial/Photo Opportunities**

- Media and Photo Advisories: Create photo opportunities around installation of meters and use of web portal.
- Host a BGE Smart Grid Kick-off event with BGE executives, special guests, celebrities, etc to mark the first installation. Venues include the local science museum, ballpark, etc.

### **Opinion Pieces**

Create opportunities for placing op-ed articles throughout the service territory on a variety of Smart Grid topics (editorial calendar to be developed). Pieces will be developed and submitted to all print outlets regardless of size and print frequency. Emphasis on explaining the benefits of Smart Grid and addressing issues (real or perceived) related to the technology. Also, focus will be on explaining how peak time rebates can encourage more responsible behaviors

## 12 Appendix

## 12.1 Examples of Program Successes

### Energy Efficiency

- Installed just approximately 965,000 energy efficiency measures
- Over \$213 million lifecycle savings Program-To-Date for all EE&C programs (including fast track)
- Over 2,500 new homes committed to ENERGY STAR New Homes program
- 10,800+ HVAC equipment rebates to date,
- Home Performance with ENERGY STAR® 90 jobs completed or in process.
- Quick Home Energy Check-up – approximately 6,000 completed
- Limited Income Energy Efficiency Program-
  - Approximately 1500 participants ,
  - Average annual savings = \$428,
  - 15% reduction in energy use
- **I&C**
  - Approximately 1,500 applications for Energy Solutions for Business,
  - Over 2,400 audits for Small Business Lighting,
  - Annual energy savings - 58 million kWh
- **Awards:**
  - 2010 AESP Honorable Mention Marketing Award
  - 2010 AMA Marketing Excellence Award
  - New Homes “2010 ENERGY STAR® Award”

### Home Energy Audit Awareness and Satisfaction

	Q3 2009	Q4 2009	Q1 2010	Q2 2010
<b>Aware of Home Energy Audits</b>	40%	40%	47%	52%
<b>Participated in Home Energy Audits</b>	8%	8%	11%	10%
<b>Satisfaction with Home Energy Audits</b>	100%	77%	75%	77%

### Lighting Discounts and HVAC Rebate Awareness and Satisfaction

	Q3 2009	Q4 2009	Q1 2010	Q2 2010
Aware of Lighting Discounts & HVAC Rebates	30%	33%	42%	50%
Participated in Lighting Discounts & HVAC Rebates	17%	26%	27%	21%
Satisfaction with Lighting Discounts & HVAC Rebates	80%	73%	85%	85%

### I&C Energy Efficiency Program Awareness and Satisfaction

	Q3 2009	Q4 2009	Q1 2010	Q2 2010
Aware of Energy Efficiency Discounts	29%	29%	26%	28%
Enrolled in Energy Efficiency Discounts	38%	25%	40%	33%
Satisfaction with Energy Efficiency Discounts	75%	83%	92%	87%

### Peak Rewards

Aware of PeakRewards <sup>SM</sup> Program	Q3 2009	Q4 2009	Q1 2010	Q2 2010
Yes	72%	73%	74%	76%

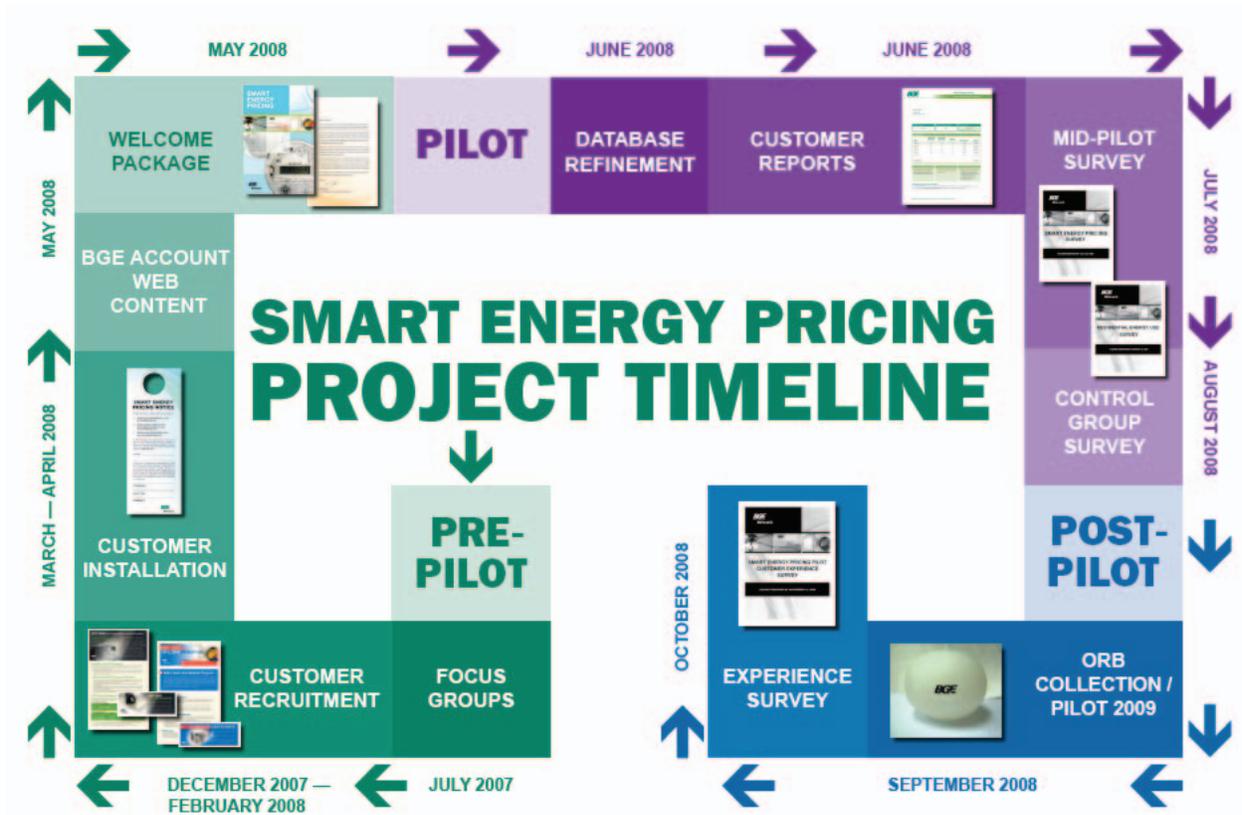
## 12.2 Smart Energy Pricing Post Pilot Awareness Survey

October 2009

SEP Post Pilot Customer Assessment Survey – October 2009

Program Participation and Satisfaction	Households Including		
	Low Income	Senior Citizens	All
<b>1. What was the <u>most important</u> reason for your participation in the 2009 Smart Energy Pricing Pilot? (Select one option)</b>			
1 <input type="checkbox"/> Potential to save money on monthly utility bills	82%	82%	86%
2 <input type="checkbox"/> Lowering future energy costs	11%	14%	11%
3 <input type="checkbox"/> Delaying the need for new power plants	0%	2%	1%
4 <input type="checkbox"/> Reducing greenhouse gas emissions	8%	3%	3%
5 <input type="checkbox"/> Other (Please specify)	0%	0%	0%
<b>2a) On a scale of 1 to 5, where 1 is "Very Dissatisfied" and 5 is "Very Satisfied", please rate your overall experience with the Smart Energy Pricing pilot program. (Select one</b>			
1 <input type="checkbox"/> Very Dissatisfied	0%	2%	2%
2 <input type="checkbox"/> Dissatisfied	3%	1%	1%
3 <input type="checkbox"/> Neutral	13%	4%	5%
4 <input type="checkbox"/> Satisfied	36%	31%	29%
5 <input type="checkbox"/> Very Satisfied	49%	61%	63%
Satisfied or Very Satisfied (Total of 4 and 5)	85%	92%	92%
<b>4. The Smart Energy Pricing Pilot program has ended and all participants who received special rebate credit opportunities have returned to the normal billing structure. Would you be interested in returning to similar billing program structure as you experienced during the 2009 summer pilot program for the summer of 2010? (Select one option)</b>			
1 <input type="checkbox"/> Yes, I would like to participate in a similar program for summer of 2010	100%	98%	99%
2 <input type="checkbox"/> No, I would not like to participate in a similar program for summer of 2010	0%	2%	1%
<b>5. Do you think the opportunity to earn rebates for reducing usage during critical peak periods should be standard for all BGE customers?</b>			
1 <input type="checkbox"/> Yes	85%	91%	94%
2 <input type="checkbox"/> No	15%	9%	6%

### 12.3 BGE Smart Energy Pricing Pilot Examples



*Dear Customer,*

Thank you for participating in BGE's Smart Energy Pricing (SEP) Pilot Program. Just as we did last year, we designed the 2009 pilot to help you save money on your electricity bill by helping you improve your energy management.

We're proud to announce that a great number of this year's participants have returned from last year's program. Welcome back. We appreciate your strong commitment to this project and your understanding of the importance of using electricity more efficiently. Your participation confirms that there is indeed an interest in exploring innovative, cost-reducing programs for energy. We look forward to working with all of our SEP customers to help save money and conserve energy to protect our environment.

This welcome package will provide you with important information that will help you maximize your savings potential. Should you have questions about the content of this package, please contact our Smart Energy Pricing Team at 866-570-7470, Monday – Friday from 8 a.m. to 8 p.m., or Saturday from 8 a.m. to 4 p.m.

As you go through the pilot, your experience and feedback will help us measure the success of this program and provide us with information for possible future expansion, you will receive an invitation to participate in a survey to evaluate your experience following the pilot.

Again, thank you for participating in this very important pilot program. We look forward to another successful year.

Sincerely,



**Neel Gulhar**  
Project Manager, Smart Energy Pricing



**FACT:** 54% of customers saved at least \$100 in rebates during the 2008 Pilot

### ABOUT SMART ENERGY PRICING

The Smart Energy Pricing Pilot enables you to save on your energy bills when electric consumption is reduced during periods of high demand, or what we refer to as **Critical Peak Periods**. The pilot aims to measure the extent to which you will shift electric consumption if the following occurs:

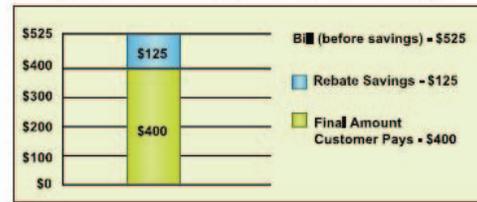
- You are given an opportunity to earn incentives in the form of rebate credits.
- You receive advanced notice for planned Critical Peak Periods in order to prepare to adjust your normal electric usage behavior.

The Smart Energy Pricing pilot encourages households to reduce electric usage, particularly during Critical Peak Periods, and in doing so, customers will save money and electricity. This reduction will help lower Critical Peak Demand and the need for costly generation, which in turn, helps keep the cost of electricity lower than it otherwise would be for all customers and better protect the environment.

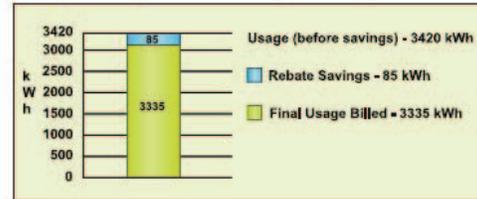
**2008 Results** In June 2008, pilot participants across Maryland showed significant reduction in electric usage and significant cost savings as a result of the Smart Energy Pricing Pilot. Over the course of the entire pilot program, the average participant reduced their electric consumption by nearly 85 kWh, saving more than \$125. Some customers even reduced their electric bill by half. The key to savings is to reduce during the right time - Critical Peak Periods.

Survey responses further showed that an overwhelming majority of participants were pleased with the overall outcome of their rebates and have decided to re-enroll in the program.

Average June - Sept. 2008 Electric Bill and Rebate Savings



Average June - Sept. 2008 kWh Usage vs Savings



### 2009 PROGRAM OVERVIEW

While there may be a few differences to this year's program, one constant that remains is that you can still save on your electricity bill by reducing usage during Critical Peak Periods. The more you're able to reduce your electricity usage, the more rebates you can earn. If you choose not to reduce your electric consumption, or are unable to lessen your usage on these days, you will lose nothing; you pay the normal rate you typically would incur if you weren't participating in the pilot. [This is a 'no-risk' program.](#)

*"To stay comfortable, yet save money, I pre-cooled during the Critical Peak notice and set my thermostat higher during the actual Critical Peak time."*

Frances, Baltimore



**FACT:** On June 27, 2008 the average rebate given was \$11.20

### HOW THE SEP PILOT PROGRAM WORKS

- The pilot will run between **June 1 and September 30, 2009.**
- Throughout the pilot period, BGE will identify certain days as Critical Peak Periods (days when electricity demand is very high due to heavy air conditioning use across the region).
- BGE will send you notification of when Critical Peak Periods will occur. Notification methods include email, telephone, and/or text message, whichever you prefer and have given us permission to use. In most cases, BGE will send notification a day in advance\* so you have ample time to plan electric use and save money.
- Upon notification of a Critical Peak Day, BGE will encourage you to voluntarily shift or decrease electricity usage between the Critical Peak hours of **2 p.m. and 7 p.m.** for which you will earn rebates.
- BGE will calculate the reduction and apply rebates to your monthly bill during the summer pilot.

\* Unplanned Critical Peak Periods, such as unforeseen weather and grid conditions, cannot be predicted and can occur on any day at any time. Therefore, you may only receive as little as 10 minutes of advanced notice. You will also receive notification once an unplanned period has ended. These unplanned events are not common and typically occur only once per summer.

*"The Smart Energy Pricing Program helped us use less air conditioning. We used our ceiling fans and did more outdoor activities during peak hours. Movies, visit family and friends, etc."*  
Lori, Glen Burnie

### SMART ENERGY PRICING SAVINGS

During the pilot, your electricity rates will remain as if you had not joined the pilot program; absolutely no rate change will occur as part of the program. This total includes the rate for electric supply and delivery which is approximately \$0.146\* per kilowatt hour. However, on Critical Peak Periods, during the hours of 2 p.m. to 7 p.m., you will have the opportunity to receive a rebate for reducing your electricity consumption below their typical usage.

*Participants will receive \$1.50 per kWh reduced. The average customers saved 10.42 kWh on each critical event in 2008.*

\* The supply rate is the rate for generating the electricity you use and is listed on the back of your BGE bill as 'BGE Electric Supply'. There are other costs to deliver the electricity to your home, which are listed under the 'BGE Electric Delivery Service' section. These rates do NOT change as a result of your pilot participation.

While all participants have the ability to save through this pilot, it is expected that customer savings will differ for a variety of reasons. Some include:

**Space and Occupancy** – some households will use more electricity than others. For example, a family of four that occupies a three bedroom, two bathroom home will typically use more electricity to meet the family's needs than a single adult living in an apartment or a couple living in a modest sized townhome with no children. However, the family of four also has a lot of discretionary electric usage to potentially cut, and save substantial money.

**Home Condition** – Most of your energy expense stems directly from cooling and heating costs. Warm air finding its way into your home during the summer and out of your home during the winter, can waste a lot of your energy dollars. One of the quickest dollar-saving tasks you can do is caulk, seal, and weather strip all seams, cracks, and openings to the outside. Pilot participants in newer homes and apartments with adequate weatherization will realize a better performance in this pilot program..

**Energy Habits** – Customers who normally use excessive amounts of electricity, especially during the typical Critical Peak hours of 2 p.m. – 7 p.m., will most likely achieve the greatest savings by reducing their electricity use and shifting activities like doing laundry or running the dish washer outside of the 2 p.m. – 7 p.m. timeframe.

*"Critical Peak Hours made for a great reason to limit my children's TV and video games."*  
Scott, Reisterstown

**Note:** While energy habits differ among households, typical energy spending usually consists of the following:

- Heating and air conditioning – 45% of the bill
- Water Heater – 13% of the bill
- Refrigerator – 8% of the bill
- Other appliances, devices and lighting combined – 34% of the bill

Keep in mind silent energy users that idle while staying plugged in, such as chargers, alarm clocks, microwaves, etc. use energy even when not in use. Unplugging these devices can be very beneficial.

### EXAMPLE OF SMART ENERGY PRICING PILOT SUMMER RATES AND REBATES

As the rebate example below indicates, if there were two Critical Peak Periods called during a given billing month, participants would be able to maximize their savings by reducing or shifting their electricity usage away from the hours of 2 p.m. to 7 p.m. on both days.

While it is not possible to determine the exact amount of your rebates ahead of time, if you incorporate some of the prior mentioned tips and reduce or shift electricity usage away from the Critical Peak Periods, between the hours of 2 p.m. and 7 p.m., you will receive rebates on your bills. **You will not be penalized if you do NOT reduce your consumption during Critical Peak Periods, you simply will not earn the rebate. This is a no-loss, no-risk program.**

Electric Supply & Delivery Service Charges on your bill			
Period	kWh	Rate (same as today)	Charge
June 8 - July 11	1000	\$0.145*	\$145.00
SEP Rebate portion of your bill			
Critical Peak Day	kWh Reduced	Rebate Rate	Credit
June 12	6	-\$1.50	-\$9.00
June 17	10	-\$1.50	-\$15.00
Electric Supply & Delivery Service Charges (charge less credit)			
SEP Savings			-\$24.00
Electric Supply Bill			\$121.00

*This is just an example. Actual rates may differ from the time this material was printed.*

The table on the previous page is an example of your savings. Your savings will appear on your bill in the following format:

**BGE**  
We're on it!

**Name:** John Q. Customer  
**Service Address:** 4085 Anywhere Street, Baltimore MD, 21201  
**Account Number:** 12345-67890

**Next Scheduled Reading:** August 10, 2009

**Summary:** Billing Date: July 11, 2009

**Payments Received:** May 25, 2009: \$141.00

**BGE Outstanding Balance:** \$0.00  
Smart Energy Pricing - See Details: -\$24.00

**Charges This Period:** BGE Electric: \$145.00  
Total Charges This Period: \$121.00

**Total Amount Due by July 30, 2009: \$121.00**

**SEP Rebate portion of your bill:** Critical Peak Day: June 12, 2009 (6 kWh reduced, -\$9.00 credit); June 17, 2009 (10 kWh reduced, -\$15.00 credit). Total credit: -\$24.00.

**Important Information About Your Bill:** The rebates you earn will be shown as a credit on your bill, and delayed by about 3 business days prior to your issue date. You are responsible for all service at your present address until you notify us.

**Please Pay by July 30, 2009:** Amount Due: \$121.00, Amount Paid: \$0.00. Please make check payable to BGE and include account number.

*"Because of Smart Energy Pricing, I reduced the amount of energy I normally use drying laundry. On nice days, I now hang my clothes out to dry."*  
Jacob, Davidsonville



**FACT:** The average customer satisfaction rating was a 9 on a scale of 1-10 for the 2008 Pilot

### CONSERVATION IS KEY

BGE recognizes that conservation is the best way for customers to manage utility bills and as global energy prices rise, we want to provide customers with options to help them control their energy costs, save money and help protect the environment.

To learn more about BGE Energy Efficiency & Conservation Programs, call 1-800-845-6195 or visit [BGESmartEnergy.com](http://BGESmartEnergy.com).

### SMART ENERGY PRICING AND THE BIG PICTURE

Energy consumption and generation is at an all-time high and continues to grow. This growth puts a strain on natural resources, which increases both the cost to produce energy and our impact on the environment. Governments at every level, utilities, communities and individuals have a responsibility to put regulation and technologies in place that allow for improved efficiencies in buildings, homes, transportation, power systems and industry.

BGE is committed to helping our customers reduce energy use and save money – two benefits, which we can maximize through forthcoming energy efficiency programs that support the EmPOWER Maryland Act of 2008. The EmPOWER Maryland Act is a statewide initiative aimed at reducing overall per capita electric consumption and demand by 15 percent by 2015. Already BGE and other utilities are researching new and improved technologies and

developing programs to give residential and business customers' greater control of their energy management.

The Smart Energy Pricing Pilot is part of BGE's continued effort to provide energy responsibly and meet the goals of the EmPOWER Maryland Act. By partnering with our customers through pilots like Smart Energy Pricing, BGE provides technology and information that helps customers better manage their energy usage. As the global community's need for energy increases, it becomes critical that we all make the effort to expand the ways we produce energy and consume energy in smarter ways.

### ONLINE TOOLS YOU CAN USE

BGE has several online tools to help you better manage energy and save money. To learn more about the many helpful pages we provide, see below:

#### BGE'S SAVE MONEY PAGE

We offer a number of ways to help our customers learn more about energy efficiency – and we often sponsor discounts or rebates to encourage the purchase of lighting, appliances and some of the many other products that have earned the ENERGY STAR® rating.

To access the BGE Save Money Page, log onto [BGE.com/savemoney](http://BGE.com/savemoney). The Save Money page provides links to other resources on BGE.com.



#### HOME ENERGY CALCULATOR

[BGE.com/savemoney](http://BGE.com/savemoney) includes a calculator designed to provide you with estimates of energy use costs based on your inputs. The Annual and Monthly results are intended to provide a comparison platform to give you the differences between the energy your home is currently using ("Base House") versus several "Scenario" alternatives. After you run a few variations, be sure to click the View Annual and View Monthly buttons for different views. Remember these are calculated estimates.

To access the Home Energy Calculator visit [BGE.com/savemoney](http://BGE.com/savemoney) and click on **Home Energy Calculator** located on the bottom left portion of the home page under the Residential Tab.



*Home Energy Calculator will receive a new look over the summer.*



**BGE INTERACTIVE HOUSE**

You can manage costs and increase comfort by conserving energy. This site will show you how to conserve energy and control your energy costs. You'll find suggestions on how to optimize your cooling system, insulate properly, light your house efficiently and much more. You'll be amazed at how a few

small changes can add up. To access the BGE Interactive House visit [BGE.com/savemoney](http://BGE.com/savemoney) and click on **Energy Conservation** at Home. The Interactive House link is the second menu heading on the list.

**EXTERNAL ENERGY SAVER RESOURCES**

BGE takes pride in working with other agencies to help spread the word about saving energy and reducing costs for everyone. We've included a few of the organizations and agencies that serve as additional resources to learn more about energy efficiency and management. Visit the sites below for more information:

- DOE.gov – Department of Energy
- EPA.gov – Environmental Protection Agency
- Energystar.gov – Energy Star
- Energy.state.md.us – Maryland Energy Administration

*"We made sure to turn off lights in rooms that were not being used,"*  
Richard, Catonsville

**SMART ENERGY PRICING PILOT FAQ's**

• **How much of a savings will I receive through my program?**

This will vary depending on how much electricity you usually use and by how much you reduce your use during Critical Peak Periods. The more you reduce during Critical Peak Periods, the more you will be able to save. The average customer savings during a four month period last year was \$125, but some customers saved as much as \$400 or more!

• **What is a Critical Peak Period?**

Critical Peak Periods are unique periods of time, typically on hot summer weekdays between 2 p.m. and 7 p.m., when electricity production is very high due to heavy air conditioning use across the country. There are two types of Critical Peak Periods – planned and unplanned. Planned periods are typically weather related and can be predicted up to a day in advance and are scheduled for the 2 p.m.-7 p.m. time period. Unplanned Critical Peak Periods, however, are often tied to unforeseen weather or grid conditions. They cannot be predicted. Therefore, they can occur on any day and the duration may be longer or shorter than five hours. These unplanned events typically occur only once per summer.

*Note:* Keep in mind unplanned Critical Peak Periods are unpredictable, therefore, you may only receive as little as 10 minutes of advanced notice. You will, however, receive notification once an unplanned period has ended.

• **When will I see my savings or how well I performed in the program?**

BGE will provide you with a report shortly after a Critical Peak Period is called. These reports will highlight when a Critical Peak Period was called and how much electricity you used during that period. You will also notice a section on your monthly bill that will reflect your rebate savings in your Smart Energy Pricing Pilot Program.

• **Will I receive any notification prior to a Critical Peak Period called?**

Yes, to help you prepare for a Critical Peak Period adjustment, BGE will notify you in a variety of ways, including e-mail, telephone, and/or text message. You will be notified by the method of your choice, which you provided during your enrollment call. Unplanned Critical Peak Periods, such as unforeseen

weather and grid conditions, cannot be predicted and therefore you may not receive much advance notice, but you will still be contacted by the same method.

To change notification options, or to provide updated information, please call the Smart Energy Pricing Team at 866-570-7470 during the hours of 8 a.m. – 8 p.m. Monday through Friday or 8 a.m. – 4 p.m. on Saturdays to speak with a program specialist.

- **If I am pleased, can I share this pilot program with my friends and/or family?**

The Smart Energy Pricing Pilot Program is available to a limited number of participants this summer. Therefore, we will not enroll referred customers at this time. Instead, if you are interested in sharing this program with friends and family, the best way is to continue with your active participation. BGE will use the research gathered from the participants to potentially develop similar programs on a larger scale. Your active participation in reducing your peak demand usage is key to the success of this pilot, and whether it should be expanded to a larger audience.

- **If I am unsatisfied with my pilot program, can I drop out of the pilot?**

We strongly encourage participants to remain a part of the pilot program during the four months it will be held, but if you are unsatisfied at any time you can unenroll by calling the Smart Energy Pricing Pilot Team at 866-570-7470 during the hours of 8 a.m. – 8 p.m. Monday through Friday or Saturdays 8 a.m. – 4 p.m.

- **What if I move during the pilot period?**

Please contact our Smart Energy Pricing Team if you are moving during the pilot. The pilot was designed only for households that would be active and present during the June 1 to September 30 period.

For more information about your Smart Energy Pricing Pilot Program or to share your comments, please contact the BGE Smart Energy Pricing Team at 866-570-7470 Monday – Friday 8 a.m. to 8 p.m. or Saturdays 8 a.m. to 4 p.m.

---

*"Last year, during Critical Peak Periods, my wife and I turned everything off and left the house to run errands and enjoy the weather. We had a great time, especially knowing we were saving money."*

Richard, Abingdon



## ANOTHER SUMMER OF OPPORTUNITIES TO SAVE MONEY

Dear BGE Customer,

The Smart Energy Pricing (SEP) Pilot Program will continue this summer and once again, you're invited to participate. Last summer, the program received praise from numerous participants who saved on their electricity bill. The average participant's saving totaled more than \$125 for the four-month program. Because of the overwhelming success, we have decided to continue the program in 2009, providing another summer of opportunities to save money.

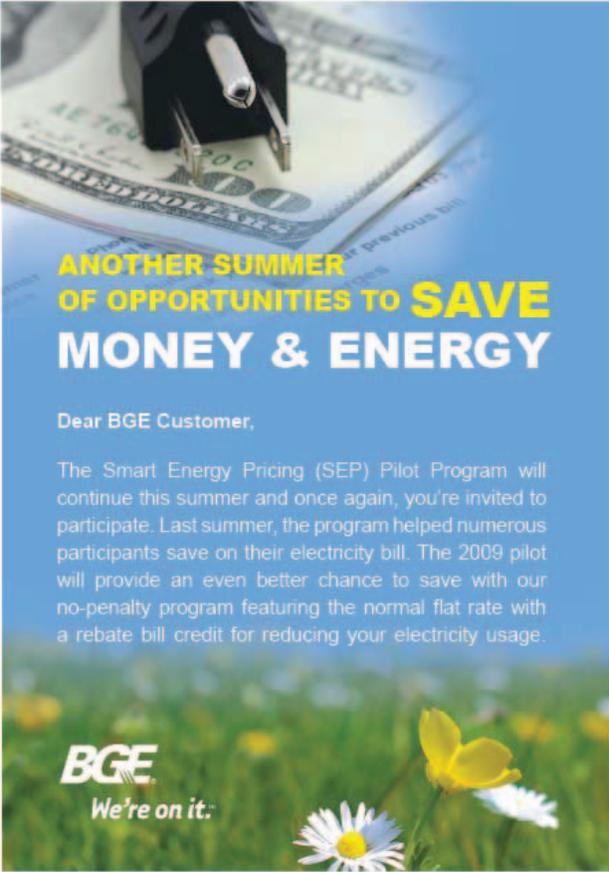
To renew your enrollment for the 2009 summer pilot, call the Smart Energy Pricing Team at 1-866-570-7470 Monday – Friday 8 a.m. to 6 p.m. or Saturday 8 a.m. to 4 p.m. or email us at [smartenergypricing@bge.com](mailto:smartenergypricing@bge.com). The Smart Energy Pricing Pilot has a limited number of spaces available for participants. To improve your chances for enrollment, please call or email by February 13, 2009.

We thank you for your earlier participation and look forward to helping you save money and energy during the 2009 pilot.

Sincerely,

Neel Gulhar  
Smart Energy Pricing, Project Manager

FIRST CLASS  
PRESORT  
U.S. POSTAGE  
PAID  
BALTIMORE MD  
PERMIT NO. 250



**ANOTHER SUMMER  
OF OPPORTUNITIES TO SAVE  
MONEY & ENERGY**

Dear BGE Customer,

The Smart Energy Pricing (SEP) Pilot Program will continue this summer and once again, you're invited to participate. Last summer, the program helped numerous participants save on their electricity bill. The 2009 pilot will provide an even better chance to save with our no-penalty program featuring the normal flat rate with a rebate bill credit for reducing your electricity usage.

To learn more about the program and renew your enrollment for the 2009 summer, call the Smart Energy Pricing Team at **1-866-570-7470** Monday – Friday 8 a.m. to 6 p.m. or Saturday 8 a.m. to 4 p.m. or email us at [smartenergypricing@bge.com](mailto:smartenergypricing@bge.com). Please be aware, the Smart Energy Pricing Pilot has a limited number of spaces available for participants. To improve your chances for enrollment, please call or email by **February 13, 2009**.

We thank you for your prior participation and look forward to helping you save money and energy during the 2009 pilot.

Sincerely,

Neel Gulhar  
Smart Energy Pricing, Project Manager

FIRST CLASS  
PRESORT  
U.S. POSTAGE  
PAID  
BALTIMORE MD  
PERMIT NO. 250



Cheryl V Parks  
100 Spot-Club Rd  
Arnold MD 21012

Critical Peak Day	Electricity Use Reduction	Rebate Amount
Sep 30	67%	\$13.92 <small>Rebate will be applied to your bill</small>

Savings Summary					
2009	Typical Use 2pm-7pm kilowatt hours	Actual Use 2pm-7pm kilowatt hours	Savings kilowatt hours	Rebate Rate	Rebate
September 30	18	6	12	\$1.16	\$13.92
September 23*	19	10	9	\$1.16	\$10.44
September 4	23	25	0	\$1.16	\$0.00
September 3	23	15	8	\$1.16	\$9.28
August 19	26	14	12	\$1.16	\$13.92
July 29	26	22	4	\$1.16	\$4.64
July 22	26	24	2	\$1.16	\$2.32
July 18*	24	30	0	\$1.16	\$0.00
July 17	24	23	1	\$1.16	\$1.16
July 16	24	23	1	\$1.16	\$1.16
June 27	29	14	15	\$1.16	\$17.40
June 10	23	19	4	\$1.16	\$4.64
<b>Total Savings</b>			<b>68</b>		<b>\$78.88</b>

**Tip: Take advantage of pleasant weather**

Save electricity – take advantage of the warm season and safely grill outdoors during critical events.

**Tip: Use natural light when possible**

Limit the use of lights, especially during the day.

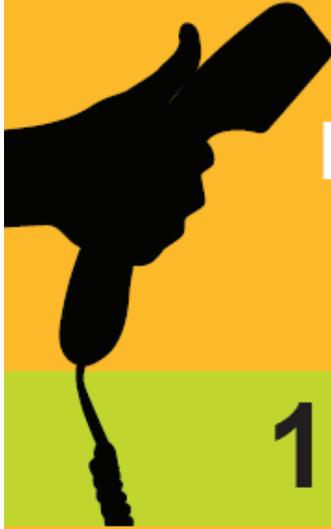
**Tip: Be mindful of your quiet gadgets**

Make sure to shut down "silent energy users" which use electricity even during sleep mode.

**Questions about Smart Energy Pricing?**  
 Call 1-866-570-7470 to speak to a program specialist Monday-Friday 8 a.m. – 8 p.m. or Saturdays 8 a.m. – 4 p.m. or send an email to [smartenergypricing@bge.com](mailto:smartenergypricing@bge.com). Visit [bge.com/savemoney](http://bge.com/savemoney) for more energy-saving tips. To receive additional tips and compare how well you're performing in the pilot against the average pilot participant, send an email to [smartenergypricing@bge.com](mailto:smartenergypricing@bge.com) and request an invite to join our twitter page found on [Twitter.com/Smart\\_Energy](https://twitter.com/Smart_Energy).

\*Represents unplanned Critical Peak Events that may have occurred outside the 2 p.m. – 7 p.m. window. Unplanned Critical Peak Events, such as unforeseen weather and grid conditions, cannot be predicted and can occur for any duration, on any day, at any time.

Baltimore Gas & Electric Company, P.O. Box 1475, Baltimore, MD 21203



# BGE SMART ENERGY PRICING HOTLINE

## 1-866-570-7470

Monday through Friday 8:00 a.m. to 8:00 p.m.  
Saturdays 8:00 a.m. to 4:00 p.m.

For additional information, email us at  
[smartenergypricing@bge.com](mailto:smartenergypricing@bge.com)

For bill specific questions call 410-685-0123



*We're on it.™*

## 12.4 BGE Web Portal Examples

For illustrative purposes only

The image displays two screenshots of the BGE web portal interface. The top screenshot shows the 'ACCOUNT STATUS' section for 'alex1's Home in ramirez1'. It includes a weather widget showing 84° F and 'Mostly Cloudy', a program status of 'NO\_TOU' with a rate of '10.00¢ / kWh', and a 'TODAY'S USAGE' bar chart. The 'PROJECTED BILL' section shows a bill cycle from May 01 to July 1, 2010, with a projected total bill of \$179.02, a projected bill to date of \$121.15, and today's cost of \$6.69. The bottom screenshot shows the 'ACCOUNT INFORMATION' section with fields for account holder, address, rate program, and email. The 'REQUIRED INFORMATION' section contains dropdown menus for dwelling type, size, cooling/heating configurations, number of people, and pool pump status. The 'OPTIONAL INFORMATION' section features two Likert scales for rating the importance of seeing energy use in environmental and economic terms. Both screenshots include a navigation bar with 'DASHBOARD', 'EXPLORE', 'HOME NETWORK', 'EVENTS', and 'USER PROFILE' tabs, and a footer with 'ABOUT', 'SEND US FEEDBACK', and '© 2010 Tendril'.



## 12.5 Examples of Utility Collateral and Communications

### 12.5.1 Sempra Energy

Website - <http://www.sdge.com/smartmeter/smRolloutIntro.shtml>

The screenshot shows the Sempra Energy website's "Smart Meter Installations" page. The header features the SDGE logo and the slogan "Here for you, every day.™". Navigation links include Home, Customer Service, Brochures & Forms, Safety, Outages, Environment, Sign Up for E-mails, and Contact Us. A search bar and language options (Español | More Languages) are also present.

The main content area is titled "Smart Meter Installations" and includes a "TEXT SIZE: A|A|A" option. It features a "My Account" section with "Log in" and "Register" links, and buttons for "For Your Home" and "For Your Business".

The "Installation Schedule Overview" section states: "Smart meters will be installed throughout SDG&E's service area in several phases." A warning icon and text indicate: "Not all residents and businesses in these communities will receive their smart meters during the time frame shown. For example, customers with time-of-use-meters or solar systems will receive their smart meters at a later date. SDG&E plans to complete all smart meter installations by the end of 2011."

The "Search For Your Home And Business" section includes an interactive map of the San Diego and south Orange Counties area. Text explains: "Find out when your home or business will have your smart meters installed with our interactive map. You can type in your full address, e.g., house or business number, street address, and city in the search box. Use the interactive map to review our smart meter installation details and schedule through the end of 2011. This map details our latest installation schedule for all the neighborhoods we serve in San Diego and south Orange Counties." Links for "Interactive map" and "Installation schedule by Community" are provided.

A "Need Help Viewing The Map?" section offers assistance: "If you need assistance using the interactive map, you can contact our customer service center at any time." A "Need Help? Contact Us." button and a "Contact us by e-mail" link are included.

The "Sign Up For E-Mail Updates" section encourages users to bookmark the page and sign up for e-mail updates: "If you're interested in finding out more specific installation information, bookmark this page and check our progress. You can also sign up to receive e-mail updates about the Smart Meter Program through SDG&E's E-mail Preference Center." A link to "SDG&E's E-mail Preference Center" is provided.

The right sidebar, titled "Smart Meter", contains a list of links: "The new face of energy use", "Taking the first steps", "Building for tomorrow", "Benefiting you in many ways", "Stay connected", "Smart Meter Education Center", "Regulatory", "Smart meter en Espanol", and "Smart Meter Home". Below the links are two buttons: "Recent news about Smart Meter" and "Tell us what you think about the Smart Meter website". At the bottom of the sidebar is a "Smart METER" infographic with the text "What are smart meters?" and "Why smart meters?".

## Smart Meter Education Center

TEXT SIZE: A|A|A

Learn more about smart meters and how they can benefit you.

### Presentations

#### November 2009

- [Smart Pricing for a Smart Grid World Conference \(pdf\)](#)

#### Oct. 20, 2009

- [Technical Advisory Committee \(TAP\) presentation \(pdf\)](#)

#### September 2009

- [Autovation \(pdf\)](#)

#### August 2009

- [Smart Energy West Coast \(pdf\)](#)

### Picture Gallery

- [See an actual smart meter installation](#)

### Customer Information

#### January 2010 Energy Notes

- [Smart Meter Rollout - Bringing you more choices, convenience and control \(pdf\)](#)
- [Smart meter fact sheet \(pdf\)](#)
- [Frequently Asked Questions](#)

### Press Releases

- [FERC Report Marks Significant Progress in Demand Response and Advanced Metering \(pdf\)](#) December 29, 2008
- [Itron OpenWay Technology to be used with Smart Meters](#) July 30, 2008

## Quick Facts About Smart Meters

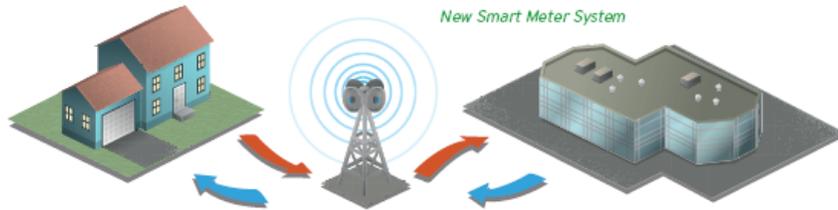


To be able to view your energy use information online, you need to sign up for My Account, SDG&E's online account management/bill payment service. You'll be able to receive smart meter updates and access online services. Visit [sdge.com/myaccount](http://sdge.com/myaccount) and have your SDG&E bill handy.



### What are smart meters?

Smart meters allow for two-way communication between you and SDG&E. These meters record your energy use information daily. It's then remotely sent to SDG&E's computer data center for operations, billing and customer service. This means SDG&E will be able to better manage overall energy needs and quickly detect power outages as they happen.



### Why smart meters?

All investor-owned utilities in California are changing out existing electric and natural gas meters with new, digital smart meters as part of the state's energy action plan. By the end of 2011, all SDG&E customers will have smart meters as this is not an optional meter upgrade. To view the installation map and schedule, visit [sdge.com/smartmeter](http://sdge.com/smartmeter).

Smart meter technology will allow you to make smart choices to save energy and money on your SDG&E bill. For example, with smart meters you'll have the same type of access to your billing and usage information that you currently have with your bank or credit card company. You'll know exactly when you use energy and what it costs to use.

### What happens to SDG&E's meter readers?

For quality assurance purposes, after initial installation, meter readers will continue to read your meter for the next few months. Eventually, meters will be read remotely. Training and workshops will be offered to SDG&E's meter readers to help them transfer to other jobs within the company. SDG&E will still need to access your meters for safety and regular maintenance.

### Is the smart meter network secure?

The Information Technology (IT) security controls in place for smart meters reflect energy industry best practices. They're designed to provide a very high level of assurance that our systems can't be compromised. SDG&E considers security a top priority. We take all reasonable and necessary steps to ensure the services we provide our customers are not only high quality and easily available, but also extremely secure.

### Future benefits of smart meters

In the future, through your smart meter you'll be able to remotely control "smart appliances" like your thermostat at your home or business through the Internet.

Very soon you'll be able to view your energy use information through the Internet. Knowing how much energy you're consuming on a daily basis can help you better manage your energy use and save money.

**For more information** about SDG&E's Smart Meter Program, call 1.800.411.7343 or visit [sdge.com/smartmeter](http://sdge.com/smartmeter).

# Smart METER

## 12.5.2 PG&E

Website - <http://www.pge.com/smartmeter/>

**For My Home** For My Business Login About PG&E Media Newsroom Careers Contact Us Español 中文  GO

**PG&E**

MANAGE MY ACCOUNT CUSTOMER SERVICE SAVE ENERGY & MONEY ENVIRONMENT EDUCATION & SAFETY

Emergency  
Out of State PG&E  
Service Guarantees  
Start, Stop & Move Service  
More Services  
Brochures & Forms  
Financial Assistance  
SmartMeter™  
Getting SmartMeter™  
Using SmartMeter™  
Program Jobsites  
FAQ and Help  
Analog Meters  
Outage & Energy Status  
Departing Home  
Energy Choice

### SmartMeter™ Information is Power

Bay Area leaders describe the role of SmartMeter™ and the promise of the green economy.

#### Getting Your SmartMeter™ Device

Learn about getting your SmartMeter™ device and when it will be installed at your home. You can view a video of the installation process, learn about what to expect on installation date and things you can do to prepare for installation.

#### What SmartMeter™ Can Do For You

Learn what SmartMeter™ can do for you by watching a video showing how Ron Hunter from Haverfield used SmartMeter™ technology to save 11% on his energy bill. You can also learn how it works, the SmartMeter™ benefits and the future of SmartMeter™ technology. SmartMeter™ technology helps you control your energy use and save money.

#### Reporting on SmartMeter™ Progress

Learn more about PG&E's SmartMeter™ program through its series of reports to California regulators.

#### Read the "See Your Power" blog





Visit [www.pge.com](http://www.pge.com) for more ideas on how to save

## Savings Opportunities

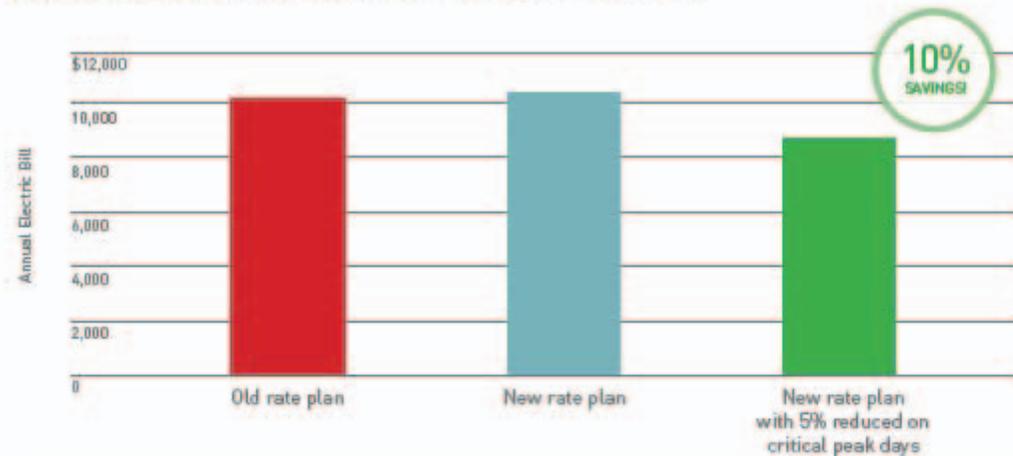
If you want to reduce your bills, make sure to reduce energy use on critical peak days, and between noon and 6:00 PM on weekdays during the summer.

For more ideas on the best steps that a business like yours could take to reduce their electricity bills, visit [pge.com](http://pge.com) or text "Biz" to PGESaves (74372837).

### Easy Ways to Save

1	Upgrade your current refrigerators to an Energy Star model	\$77
2	Upgrade your current ovens to an Energy Star model	\$542
3	Upgrade your current freezers to an Energy Star model	\$135
4	Enroll in the PG&E efficient lighting program	\$288

### POTENTIAL SAVINGS FROM THE NEW CRITICAL PEAK PRICING PLAN



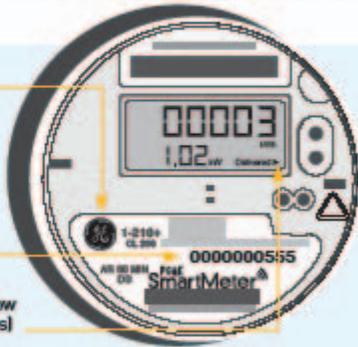
Under the new critical peak pricing plan, if you do not change your electricity use your bill is expected to remain mostly unchanged. However, if you reduce your electricity use a mere 5% during critical peak days, you could reduce your bill by close to \$1,000 a year.

PG&E 245 Market Street, San Francisco, CA Business Customer Service Center 1-800-468-4743

# Welcome to the PG&E SmartMeter™ Program

## How to read your General Electric-brand electric meter.

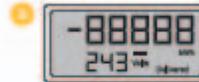
- 1 **GE Logo:**  
Confirm you have a GE-brand meter
- 2 **Meter Number:**  
This is the number shown in the Electric Account Detail of your energy statement under the heading Meter #
- 3 **Digital Display Window:**  
Check your energy use (see below and right for display descriptions)



Your GE SmartMeter™ electric meter automatically cycles through four displays.



The five-digit number at the top is the amount in kilowatt hours (kWh) of energy you have used to date since the installation of the meter. For reference, if you leave a 100-watt light bulb on in your home for one hour per day for 30 days, the energy used is 100 watts × 30 hours = 3,000 watt hours, or 3 kWh. The three-digit number at the bottom is the actual amount of energy you're using right now. For instance, 1.02 means you're using 1.02 kilowatts—or 1,020 watts.



The number 88888 with all the elements lit verifies that the display is working properly. The three-digit number at the bottom is the actual voltage (or electrical potential) right now.



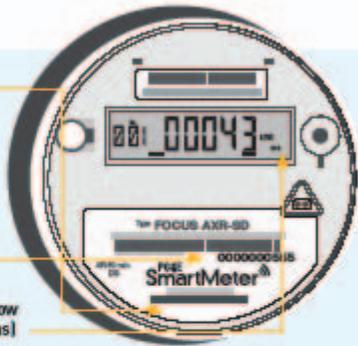
On indicates the switch is closed, and power is being delivered. Off indicates the switch is open, and power is not being delivered.



AdI (for Advanced Distribution Infrastructure) displays when the meter is communicating with the on-board SmartMeter™ module. Delivered, at the bottom right of the displays, indicates use. If there is no power being used, it doesn't display.

## How to read your Landis+Gyr-brand electric meter.

- 1 **Landis+Gyr Logo:**  
Confirm you have a Landis+Gyr-brand meter
- 2 **Meter Number:**  
This is the number shown in the Electric Account Detail of your energy statement under the heading Meter #
- 3 **Digital Display Window:**  
Check your energy use (see below and right for display descriptions)



Your Landis+Gyr SmartMeter™ electric meter automatically cycles through either three or five displays, depending on your model.



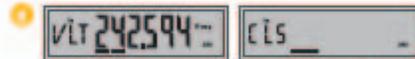
This five-digit number is the amount in kilowatt hours (kWh) of energy you have used to date since the installation of the meter. If you leave a 100-watt light bulb on in your home for one hour per day for 30 days, the energy used is 100 watts × 30 hours = 3,000 watt hours, or 3 kWh.



The number 888888 with all the elements lit verifies that the display is working properly.



This six-digit number is the actual amount of energy you're using right now. For instance, 001.939 means you're using 1.939 kilowatts—or 1,939 watts.



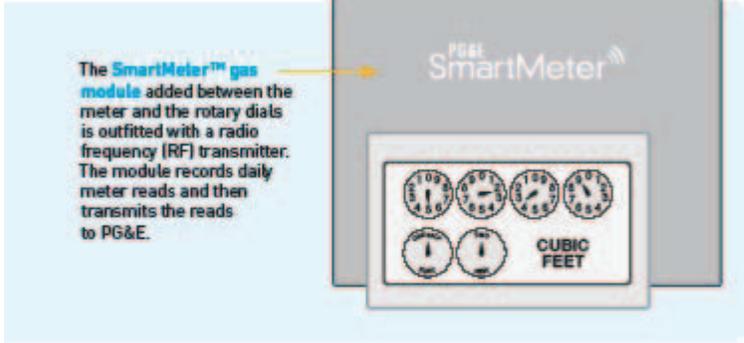
VLT indicates voltage (or electrical potential) is being delivered. CLS indicates the switch is closed and power is being delivered. These displays are not available on all models.



VLT reading of zeros indicates voltage is not being delivered. OPN indicates the switch is open and power is not being delivered. These displays are not available on all models.

Read the bottom section on the back to find out how to track your hourly electric use online.

How to read your SmartMeter™ residential gas meter.



The SmartMeter™ gas module added between the meter and the rotary dials is outfitted with a radio frequency (RF) transmitter. The module records daily meter reads and then transmits the reads to PG&E.

The odometer-like mechanical dials on your gas meter measure the therms of gas that have traveled through the meter into your home.

Your gas meter uses multiple clock hands and typically has four dials to read. The first and third dials spin counter clockwise, while the second and fourth dials spin clockwise. When reading the meter, if the dial is between two numbers, use the lower number. For instance, the meter pictured here reads 5, 2, 3, 9.

The two dials without numbers are used by PG&E when testing the meter for accuracy.

Read the next section to find out how to track your daily gas use online.

How to track your energy use online.

Now for the first time ever, you can see exactly how much gas and electricity you're using up to the previous day and when you're using it. Knowing how much energy you're using puts you in control of your energy use, and allows you to make smarter energy choices.

With SmartMeter™ technology, you can track your energy use history online. If you don't already have an online account, you can set one up in just a few minutes:

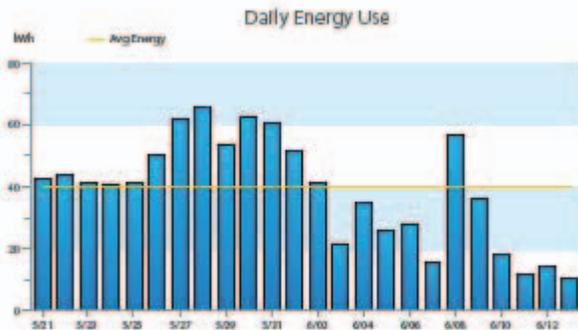
- 1 Go to: [www.pge.com/myaccount](http://www.pge.com/myaccount)
- 2 The first time, you will click on 'Sign Up'
- 3 Fill in the required information. You'll need your PG&E account number and the primary phone number on your account.

Once you've established your online account, you can 'Login' and access your gas and electric energy use history right up to the previous day at [www.pge.com/myaccount](http://www.pge.com/myaccount).



Once you've logged in, click on 'Usage' on the left navigation bar.

Select 'Usage History' to see your month-by-month energy use and compare your monthly bills. Clicking on 'Hourly/Daily Usage' will show you hour-by-hour electric or day-by-day gas energy use information (example shown below).



 For more information about the SmartMeter™ program, visit [www.pge.com/smartmeter](http://www.pge.com/smartmeter) or call 1-866-743-0263.

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**More ways to reduce your bill.**

SmartMeter™ technology also gives you access to new electric rate plans like SmartRate™. The SmartRate program encourages customers to use less electricity from 2–7 p.m. on no more than 15 of the hottest summer days. Customers pay more during those few hours and pay less for all other hours of the summer months. For more information, go to [pge.com/smartrate](http://pge.com/smartrate).



**Get alerts about your energy use.**

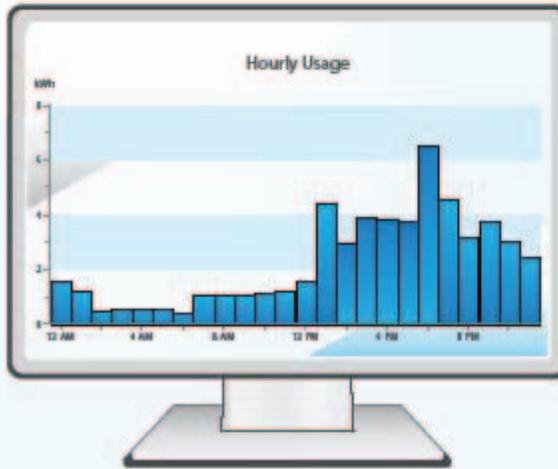
In the coming months, you'll also be able to get alerts from PG&E by phone or email telling you how much electricity you've used in your billing period. You can use these messages to help manage usage and lower your bills.

# SmartMeter™ technology is coming to your area.

Giving you more control over your energy usage.

With SmartMeter™ automated meter-reading technology, you will no longer have to wait for a monthly bill to know how much energy you use.

Within approximately 30 days of installation, you will be able to log on to [pge.com/myaccount](http://pge.com/myaccount) to see and track your hourly electric and daily gas energy use.



**Online you can:**

- See usage data from the previous day
- Track electricity use hour by hour or track both gas and electric use day by day
- Compare your energy use month by month

You can use this information to see how and when you can reduce consumption and lower your overall energy bills.



For more information about the SmartMeter™ program, visit [pge.com/smartmeter](http://pge.com/smartmeter) or call 1-866-743-6263.

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2-Sided SmartMeter Benefits: 8.5" x 11" Side 1



# SmartMeter™ technology for the future.

Helping build the fully networked, energy-efficient home and business. Providing information to give you control over how much energy you use and when you use it.



**THERMOSTAT**  
See what each adjusted degree of cooling will actually cost you, in real time, based on the electricity price at that specific time of day.



In the future, with technology enabled by PG&E and our partners, you'll be able to control a network of smart appliances and electronics from an energy control hub.



**POWER RESTORATION**  
SmartMeter™ technology will alert PG&E to a power outage so we can quickly get the lights back on. Plus, if you're moving and need your service turned on or off, we can do that remotely.



**ELECTRIC VEHICLE**  
Program your charging unit to begin charging your electric car during off-peak hours when electric prices are the lowest.



**WEB-ENABLED DEVICE**  
Use any web-enabled device to check your energy use even when you're not at home.



**SMART APPLIANCES**  
Appliances such as your refrigerator will have the ability to automatically go into power-saving mode to minimize energy use.



For more information about the SmartMeter™ program, visit [pge.com/smartmeter](http://pge.com/smartmeter) or call 1-844-743-8143. Para más información o para solicitar más detalles en español, por favor llame a 1-800-648-6799 o visite [pge.com/espanol](http://pge.com/espanol). 获取更多詳情請來電中文服務專線，請撥1-800-648-6799或上網[pge.com/chinese](http://pge.com/chinese). SmartMeter™ is a trademark of Smart Devices, Inc. and is used by permission. PG&E refers to Pacific Gas and Electric Company, a subsidiary of PG&E Corporation. ©2009 Pacific Gas and Electric Company. All rights reserved.

2-Sided SmartMeter Benefits: 8.5" x 11" Side 2

## 12.5.3 OG&E

Website - <http://www.oge.com/environment/EnergyEfficiency/Pages/Smart%20Grid.aspx>

The screenshot shows the OG&E website's 'Positive Energy® Smart Grid' page. The page features a navigation bar with 'OG&E' logo, 'OG&E CORPORATE', 'FOR YOUR HOME', 'FOR YOUR BUSINESS', and 'MY ACCOUNT'. Below the navigation bar are links for 'ABOUT OGE', 'COMMUNITY', 'ENVIRONMENT', 'SAFETY', 'NEWS', 'INVESTOR RELATIONS', and 'CAREERS'. The main content area is titled 'POSITIVE ENERGY® SMART GRID' and includes a sub-header 'Energy Efficiency' with a list of links: 'Positive Energy™ Smart Grid', 'Technology Center', 'Energy for Home', and 'Energy for Business'. The main text describes OG&E's investment in smart grid technology to help customers manage energy use and costs. It mentions a secure wireless network for two-way, real-time communication with smart meters and touch-screen information panels. A photo of a family is shown. The text also mentions a study in Norman, Oklahoma, and the installation of 42,000 smart meters. A sidebar on the right contains 'RELATED LINKS' with a green leaf icon, 'Positive Energy TOGETHER' with a sub-header 'Be part of our Smart Study', 'How Smart Grid Works', 'More Positive Energy', 'For Your Home' with sub-links 'Energy Tips for Your Home' and 'Home Calculator', and 'CUSTOM ENERGY REPORT' with a sub-link 'Custom Energy Report'.

**OG&E**

OG&E CORPORATE | FOR YOUR HOME | FOR YOUR BUSINESS | MY ACCOUNT

ABOUT OGE | COMMUNITY | ENVIRONMENT | SAFETY | NEWS | INVESTOR RELATIONS | CAREERS

OG&E Home > Environment > Energy Efficiency > Positive Energy™ Smart Grid

Energy Efficiency

- Positive Energy™ Smart Grid
- Technology Center
- Energy for Home
- Energy for Business

Environmental Footprint

Environmental Initiatives

- Wind Power
- Geothermal
- Self Generation

### POSITIVE ENERGY® SMART GRID

OG&E is investing in a new technology to help customers more efficiently manage energy use and costs to fit their lifestyles. It also helps OG&E offer even more reliable service in a cost effective manner and to maintain reasonable rates.

OG&E calls this our Positive Energy® Smart Grid program.

It uses a secure wireless network for two-way, real-time communication with smart meters installed on the outside of customer homes and, communicating programmable thermostats and touch-screen information panels inside customers' homes. Information also will be made available to customers on a secure Internet portal.



While we believe smart grid technology is the foundation for the future for our industry, we are carefully identifying how it can best benefit our customers and our company.

The first step was a study begun in the summer of 2008, involving 6,600 smart meters installed in northwest Oklahoma City. We are able to remotely read customers' meters, connect and disconnect service and know immediately if a customer has experienced a power outage. About 25 of those customers have received touch-screen information panels and communicating programmable thermostats, allowing customers to see what electricity is costing each hour of the day so they can make informed decisions about their electricity use.

#### Norman First Smart Grid Community

Our next step in 2010 is installation of 42,000 smart meters on customer homes in Norman, Oklahoma, and the installation of the information delivery infrastructure to carry the information to and from the customers and OG&E. An estimated 3,000 Norman customers will be asked to participate in a study in the summer of 2010 and 2011 using the in-home devices and/or Internet portals as a means to get electricity pricing and usage information.

OG&E received notice October 27, 2009, that its application for \$130 million in smart grid stimulus funds has been approved, pending negotiations with the Department of Energy. The company will seek state regulatory approval for recovery of the remaining costs of the almost \$300 million deployment across its entire service territory over the next three-five years.

At the same time we're working with our employees and knowledgeable industry partners on a plan to expand smart grid to customers in our entire 30,000 square mile service territory.

More information about the OG&E customers and employees involved in the Oklahoma City smart grid study

#### RELATED LINKS



#### Positive Energy TOGETHER

Be part of our Smart Study  
Live in Norman? You can be part of a study to see if smart grid technology helps you save on your electric bill.

How Smart Grid Works  
Watch this multimedia demonstration about how Smart Grid technology helps customers save energy and money.

More Positive Energy  
Learn more about the benefits of smart grid.

#### For Your Home

Energy Tips for Your Home  
Ways to save time, energy and money.

Home Calculator  
Estimate your home's energy usage.

Energy Efficiency for Your Home  
Ways to make your home more energy efficient while maintaining its comfort.

#### CUSTOM ENERGY REPORT

Learn what you can do this week, this month and this year to save time, energy and money.

Custom Energy Report



# News

MEDIA ADVISORY FOR February 15, 2010

## **OG&E installs first smart meters in Norman** *Entire community to get energy efficiency technology*

- WHAT:** The first installation of a smart meter in Norman, OG&E's first smart grid community.
- WHERE:** The home of OG&E customers Gary and Pam Clinton, 1015 Lincoln Green, Norman.
- WHEN:** 9 a.m., Monday, February 15, 2010
- WHY:** OG&E is replacing 42,000 meters for Norman business and residential customers with smart meters. Smart meters measure energy use just like current meters. The difference is smart meters have a component that communicates energy service and kilowatt use information through a secure wireless network to OG&E. The smart meters allow for remote meter reading, service connection and disconnection and automatic outage notification should a customer lose power. The smart meters will be installed across Norman beginning Feb. 15 through May.
- BACKGROUND:** OG&E is installing smart meters as part of its system wide comprehensive deployment of smart grid technology over the next three to five years. It's one of four strategies OG&E is pursuing to delay the need for a new fossil fuel power plant unit until at least 2010. Other smart equipment also is being installed on the OG&E electric system to increase power quality and reliability.
- As part of the Norman deployment, OG&E is recruiting customers for a study of new smart grid equipment in the home or business and new pricing plans. The study will determine if having individualized energy use and cost information helps small business and residential customers make choices to use less electricity during hot summer days when the cost of electricity is highest.
- VISUALS:** Meter techs taking reading and then replacing meter with first smart meter in Norman, along with homeowners.
- CONTACT:** Karen Kurtz (405) 823-8201  
Sandra Longcrier (405) 808-8605

WITH ALL YOUR POWER  WHAT WOULD YOU DO?



We're partnering with Norman customers on an exciting new initiative that will influence energy usage in this country for decades – as OG&E's **Positive Energy® Smart Grid** program brings intelligent energy technology to our state.

## America's energy future is being transformed, right now. In Norman.

OG&E's **Positive Energy® Smart Grid** program is here, bringing with it a smarter energy future:

- Soon, new "smart meters" will replace existing electric meters.
- This allows remote meter reads, connection and disconnection.
- Smart meters can help with faster restoration times, plus reduce the need to send OG&E trucks — lowering our operating costs and keeping your rates among the lowest in the country.
- Norman customers can be part of a study to find out if having energy use and cost information delivered

to their homes or businesses, via the smart grid, can help them better manage their power and bills – as a part of our **Smart Study TOGETHER™**.

Working together, we can manage our power more efficiently — deferring the need for costly new power plants, while meeting the growing demand for energy and environmental stewardship.

If you live in Norman, learn more or sign up to participate in the study at [oge.com/smartstudytogether](http://oge.com/smartstudytogether).

**OG&E**

OG<sub>E</sub>.COM

**POSITIVE  
ENERGY  
TOGETHER**

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OG&E Electric Services

January 13, 2010

Name  
Address  
City, State, Zip (to show through envelope window)

Dear first name last name:

Great news--Norman will be one of the first comprehensive smart grid communities in America!

Smart grid technology offers several benefits to you and to OG&E operations that will save money, save time and help the environment. It supports the following innovations:

- Automatic notification to OG&E when a power outage occurs at your home or business
- Remote meter reading
- Remote connection and disconnection of electric service (\*see note at end of letter)

During the next several months, OG&E employees and contracted personnel will be crisscrossing the town to install smart meters on virtually every one of our customer's homes and businesses, including yours.

All workers will be identified as OG&E or working for OG&E, as will their vehicles, uniforms and identification cards. When they visit your home or business they will leave a notice so you know your smart meter has been installed. Or if there is a problem, the notice will include a phone number for you to call to reschedule your smart meter installation.

Because the technician has to remove your current meter to replace it, you will experience a temporary loss of power. In most cases the outage should last for only a few seconds.

The new smart meters perform the same function and are subject to the same strict testing standards as current OG&E meters. The main difference is that your smart meter has a communications component to send and receive information from OG&E via a secure, wireless network also being installed around town throughout the first half of this year.

In fact, if you are interested in being part of a ground-breaking study in Norman, please visit [www.oge.com/smartstudytogether](http://www.oge.com/smartstudytogether). Enrollment in the study is limited. As a participant you will receive information at your home or business about how much electricity you are using, the cost of that electricity and how you can make smart choices to reduce your bill.

It is expected that the average Norman study participant will have the opportunity to save over normal electric rates this summer. Plus, your results and feedback will help chart the course for OG&E and America regarding energy efficiency. It's that important!

Additional personnel will be in Norman over the next several months to install other smart grid technology on OG&E's distribution and transmission network. It will help to improve power quality and help prevent or reduce service outages. Others will record OG&E equipment and facilities to update current service maps and continue to improve service.

Smart grid technology can help cut costs, lead to greater efficiency in energy management and is integral to OG&E's strategy to delay the building of a new power plant until at least 2020. All of these benefits can add up to hundreds of millions of dollars in savings for OG&E customers and help for the environment.

Thank you for joining us in this effort. Let's get smart **TOGETHER**.

OG&E Customer Service Team

\*Please note that because smart grid will allow us to remotely turn off service without dispatching a crew member to the smart meter to disconnect service, we will no longer place a notice on the door when service is disconnected. Customers scheduled for service disconnection will continue to receive notification by mail and phone as we do today.



WITH ALL YOUR POWER  WHAT WOULD YOU DO?

## "I'll connect you to OG&E's smart grid."

Over the next few weeks, you'll see Corix and OG&E technicians and trucks in action, all over Norman residential and business neighborhoods. That's because Corix is partnering with OG&E to turn Norman into one of our country's smartest cities, as part of our Positive Energy Smart Grid program.



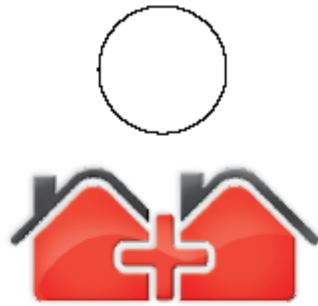
Together, we're replacing existing meters with new electrical smart meters citywide. Smart meters communicate your energy use to OG&E and can be read, connected or disconnected remotely. And in the near future, OG&E will be able to receive automatic notification of any outages from your smart meter. So we can work more efficiently, which helps keep your bills lower.

Eventually, most customers' homes and businesses will be "smart." We'll knock on the door and leave information that your smart meter has been safely installed. You may notice a blinking digital clock or two, due to a short power interruption. Upon completing the installation of smart meters and smart grid equipment this spring, Norman can reach the goal of using energy more wisely sooner. If you have any questions about your smart meter installation, please call toll-free 877-367-4146.

**POSITIVE  
ENERGY  
TOGETHER**

OG&E  
© 2011 OG&E Energy Group

**SHANE**  
PROJECT MANAGER,  
CORIX UTILITIES  
CONTRACTOR FOR OG&E



WITH ALL YOUR POWER  WHAT WOULD YOU DO?

## You are now part of OG&E's smart grid community.

We've installed a new electrical meter today, and you may have digital clock displays that are blinking because of the short power interruption required. Smart meters are part of our Positive Energy® Smart Grid program that will provide more opportunities for you and OG&E – TOGETHER® – to better manage electricity costs and reliability. With smart meters, OG&E can remotely read your meter each month and connect and disconnect service. And soon it will be part of the OG&E outage management system, automatically notifying us if your power is interrupted.

Each meter provides a vital link in the creation of the new smart grid network that benefits you and OG&E. The smart meter performs the same function as your previous meter at the same high accuracy rate and does not contain any personal information about you.

If you have any concerns regarding your meter installation, please call OG&E customer service at 272-9741. If you're calling from outside the Oklahoma City metropolitan area, call us toll-free at 800-272-9741.

Thank you.



OGE.COM

OG&E Form SG-1a (Rev. 04/10)



## We were unable to install your new smart meter.

Our technicians tried to install your new smart electrical meter today, but were unable because of the following:

- An obstruction such as a bush, tree or other obstacle. You will need to clear that obstruction before the smart meter can be installed.
- We could not gain access to your meter.
- Other \_\_\_\_\_

Please call 877-367-4146 toll-free within the next seven days to reschedule your smart meter installation.

Don't miss out on the great opportunities our Positive Energy® Smart Grid technology will provide for you and OG&E to better manage electricity costs and reliability.

Thank you.



OGE.COM

OG&E Form SG-2a (Rev. 04/10)

## 12.5.4 ONCOR

Website - [http://www.ongor.com/tech\\_reliable/smarttexas/default.aspx](http://www.ongor.com/tech_reliable/smarttexas/default.aspx)

**ONCOR**

CR Relations

Technology & Reliability

Search  Go

Delivering Electricity About Oncor News Technology & Reliability Safety Community Contact Us

Oncor Home > Technology and Reliability > Smart Texas

**Pathway to Power**

- Smart Texas
  - New Advanced Meter Deployment Schedule
- News and Info
- Interactive Pathway to Power Smart Grid
- Customer Education Materials
- Games
- Tour Schedule
- Video
- FAQs

**SMART TEXAS - RETHINKING ENERGY**

The program will allow consumers to see first-hand the benefits of the technology and how they can take advantage of those benefits by using the new smart meters that will be installed throughout Oncor's service area through the year 2012.

"With this education campaign, we believe that consumers in Oncor's service area will better understand how to take advantage of the opportunities that the new smart meters provide and will be able to reduce their demand - along with lowering their bills and helping the environment," said Bob Shapard, Oncor CEO.

- [New Smart Meter Deployment Schedule](#)
- [News and Info](#)
- [Interactive Pathway to Power Smart Grid](#)
- [Customer Education Materials](#)
- [Games](#)
- [Tour Schedule](#)
- [Video](#)
- [Frequently Asked Questions \(FAQs\)](#)

If you have questions, please contact your **Retail Electric Provider** with the number provided on your electric bill or call Oncor at 1-800-518-2380.

**SMART TEXAS**  
rethinking energy

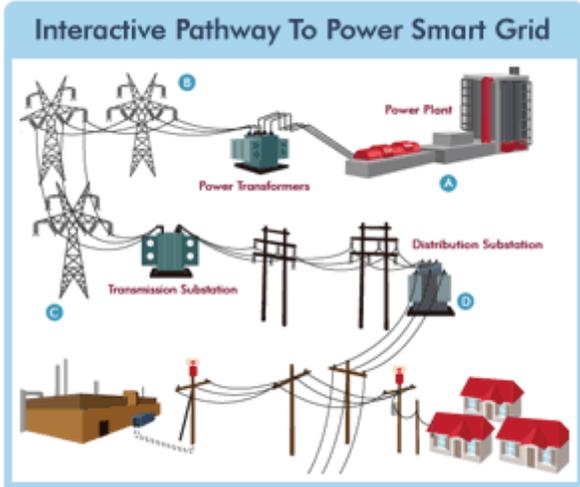
1090288

ADVANCED METERING SYSTEMS  
INSTALLED TO DATE

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[www.facebook.com/smarttexas](http://www.facebook.com/smarttexas)

[En Espa ol](#)

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## Simple Steps to Conserve Energy in Your Home

**SMART TEXAS™**  
rethinking energy

1. Replace regular light bulbs with CFLs.
2. Use a power strip and switch to OFF when electronics are not in use.
3. Operate dishwashers and washing machines with full loads only.
4. Clean or replace air filters once a month.
5. Seal leaks around doors and windows with weather-stripping and caulking.



[www.smarttexas.com](http://www.smarttexas.com)  
[www.facebook.com/smarttexas](https://www.facebook.com/smarttexas)  
[www.twitter.com/smarttexas](https://www.twitter.com/smarttexas)

focus On



Smart Texas

Mobile Experience Center

A Word From...

Jim Greer

Senior Vice President of Asset Management & Engineering



We always talk about how we do things bigger here in Texas, and our roll-out of advanced meters will be no different. This deployment is a giant step forward to transform Texas' electric transmission and distribution network

into the most technologically advanced grid in the nation by 2012, which should lead to significant emissions reductions and economic benefits to consumers.

For so long we've been preaching an energy efficiency message and asking consumers to control their energy consumption but it was like we gave them a car with no speedometer. How can you slow it down if you have no idea how fast you're going? Well, the existing meter outside your home has been around since before the rotary phone and the time has come to harness the power of technology so that all Texans can be smart about their energy consumption.

We hope you will embrace this new tool as a way to rethink the energy you use and start to play a more active role in moderating your consumption.

We realize that in order to embrace this new tool, you need to learn about its capabilities and how our technology investment works. This is why we are bringing learning opportunities through our Smart Texas Mobile Experience Center to the people we serve in the communities in which they live. This is the first time in the nation that a utility company has brought the Advanced Meter education experience directly to the community. We want our customers and communities to know how important they are to this initiative.



Rethinking Energy with Advanced Meters

Think about the energy you use to cool your home in the hot Texas summer, or to catch up on laundry on the weekends, or to run the dishwasher repeatedly to keep up with the seemingly endless stream of dirty dishes. How much energy are you using to run your home and are there ways to reduce your consumption and still do the things you need to do to live comfortably?

Until now, the outside meter with its spinning wheels and small print was the only indication of how you were consuming energy and most consumers didn't have the slightest idea what the meter was telling them.

With a recent announcement about advanced, automated meters, Oncor and Landis+Gyr will transform Texas' electric transmission and distribution network into the most technologically advanced grid in the nation by 2012, which will lead to significant emissions reductions and economic benefits to consumers.

At the center of this transformation is an advanced meter created by Landis+Gyr and customized for the Texas market allowing our state to put the power of energy efficiency in the hands of our residents. Similar to the way you can see the temperature on a thermostat and adjust it

up or down, the new advanced meters will enable you to see your energy consumption and adjust it. In fact, eventually your Advanced Meter will be able to "talk" to your appliances inside your home.

You'll be hearing more about these advanced meters as the two companies—Oncor, your electric delivery provider and the company that keeps your lights on, and Landis+Gyr, the manufacturer of the advanced meters—take the Smart Texas Mobile Experience Center to your community.

The Mobile Experience Center features 1,000 square feet of interactive videos and real-world demonstrations including one featuring the state's Power to Choose initiative. The exhibits allow customers to see first-hand how to use the new meters that will be installed as well as how to choose a Retail Provider to maximize the savings opportunities.

The trailer will be brought to hundreds of cities across the Oncor service territory to ensure all of its customers have a chance to learn more about the new meters and their potential.





## WELCOME TO SMART WICHITA FALLS

The power is now in your hands

With the new digital Advanced Meters from Oncor, the company that delivers electricity to our home, you have all the information you need to make smarter decisions about how you use electricity.

Over time, you will have the tools to reduce your electricity use, lower your electricity bills, and create a better environment for you, your community, and all of Texas.

In the coming weeks, Oncor will be in Wichita Falls demonstrating the features of these new meters and how you can use them to make an impact on your electricity usage. Come visit us at our Mobile Experience Center to see firsthand how your meter can work for you. Or, watch for a brochure on your door with more details on how Advanced Meters can put the power in your hands.

**SMART TEXAS**  
rethinking energy

[www.smarttexas.com](http://www.smarttexas.com)  
[www.powertochoose.org](http://www.powertochoose.org)





## IMPORTANT INFORMATION

ABOUT YOUR NEW  
DIGITAL ADVANCED METER  
AND POTENTIAL SAVINGS  
BENEFITS FOR YOU

INFORMACIÓN IMPORTANTE  
ADENTRO



[www.oncor.texas.com](http://www.oncor.texas.com)

[www.powertochoose.org](http://www.powertochoose.org)

The Public Utility Commission of Texas is proud to work with Oncor to bring new Advanced Meters to your home and community. Since electric competition started, our mission has been to make sure that consumers know about the choices that are available when it comes to electricity, including retail electric providers and plans. For example, you can visit [www.powertochoose.org](http://www.powertochoose.org) to review and select the best electricity provider and plan that fits your needs.

Until now, you have received an electric bill with the total amount due, but many times without a complete understanding of how you used electricity. The new Advanced Meters will enable you to know when you are using the most electricity and give you the ability to track that use in 15-minute intervals. This way you can make decisions or change behaviors to help lower your energy use and reduce your costs. We are putting the control of electricity use in your hands. Soon, we expect Retail Electric Providers will offer innovative plans made possible by Advanced Meters.

Texans need the right tools if we are to begin reducing energy demand. This meter will not only give you cost savings, but also provide for greater reliability to keep your lights on and make the air cleaner. The Advanced Meters will put us on the road to making these improvements; and the choices you make will have a positive effect on the future of our electric grid and the environment. The results will be better for Texas and better for you.



Sincerely,  
Barry T. Smitherman  
Chairman,  
Public Utility Commission of Texas



[www.puc.state.tx.us](http://www.puc.state.tx.us)



[www.oncor.texas.com](http://www.oncor.texas.com)

[www.powertochoose.org](http://www.powertochoose.org)

Dear Electric Customer:

In the next few weeks, Oncor, the company who delivers electricity to your home, will be replacing your existing electricity meter with a new digital Advanced Meter. During replacement, there will be a momentary interruption of your power, so you will want to take any necessary precautions during that time.

What does this mean for you? It means that once your new digital Advanced Meter is in place, you will have more information at your finger tips to help you better understand how and when you are using electricity. This will allow you to make better choices about your electricity usage to help save you money on your electric bill.

**Your new digital Advanced Meter:**

- No longer requires a meter reader to come to your home
- Provides instant power outage notice and more reliable electricity delivery to your home
- Sends information wirelessly to Oncor
- Over time will provide you with detailed readings of your electricity use through the Oncor website
- Communicates easily with other programmed devices within the home to monitor electricity consumption
- Records electricity use in 15 minute intervals
- Has no moving parts – it is solid-state and fully digital

If you have questions, please contact your Retail Electric Provider with the number provided on your electric bill or call Oncor at 1-800-518-2380.

Thank you for your cooperation.

Estimado Consumidor de Electricidad:

En las próximas semanas, Oncor, la compañía que entrega electricidad a su hogar, substituirá su medidor existente de la electricidad por un nuevo Medidor digital Avanzado. Durante el reemplazo, habrá una interrupción momentánea de su energía, así que usted querrá tomar todas las precauciones o medidas necesarias durante ese tiempo.

¿Qué significa esto para usted? Significa que una vez que su nuevo Medidor digital Avanzado está en lugar, usted tendrá más información a la mano para ayudarle a mejor entender cómo y cuándo usted está consumiendo electricidad. Esto permitirá que usted tome mejores decisiones sobre su uso de la electricidad para ayudarle a ahorrar dinero en su factura de electricidad.

**Su nuevo Medidor digital Avanzado:**

- Eliminará la necesidad de que un técnico venga a su casa para leer el medidor
- Proporcionará notificación inmediata sobre apagones y entrega más confiable de la electricidad a su hogar
- Envía la información inalámbricamente a un sistema de datos centralizado en Oncor
- Sobre tiempo te va proveer lectura detallada de tu uso de electricidad sobre el sitio de web de Oncor
- Se comunica con otros aparatos programados dentro del hogar para supervisar la consumición de electricidad
- Registra la información de consumo de electricidad en intervalos de 15 minutos
- No tiene ninguna pieza móvil – es de estado sólido y completamente digital

Si tiene preguntas, por favor contacte su abastecedor eléctrico al por menor con el número proporcionado en su cuenta eléctrica o llame Oncor en 1-800-518-2380.

Gracias por su cooperación.

FOR MORE INFORMATION,  
VISIT THE SMART TEXAS WEBSITE:

[www.smarttexas.com](http://www.smarttexas.com)

[www.powertochoose.org](http://www.powertochoose.org)



PARA MAS INFORMACIÓN,  
VISITE:

[www.smarttexas.com](http://www.smarttexas.com)

[www.powertochoose.org](http://www.powertochoose.org)

## 12.5.5 Duke Energy

Website - <http://sustainabilityreport.duke-energy.com/products/smart-grid.asp>



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## PRODUCTS & SERVICES

### SMART GRID: ENABLING AFFORDABLE, RELIABLE AND CLEAN ENERGY

Building a smarter power grid is an essential part of our efforts to provide customers with affordable, reliable and increasingly clean energy. To help accomplish this goal, we plan to invest up to \$1 billion over the next five years to continue modernizing our power delivery system.

"Smart grid" refers to the digital modernization of energy delivery. By adding digital, two-way communication capabilities to our power lines, we can boost efficiency, help reduce demand, and improve reliability and customer service.

For example, smart grid technologies:

Allow us to read meters and fulfill requests for service connections and disconnections remotely

Help reduce outages through new "self-healing networks" made up of digital sensors and switches that automatically reroute power when a problem occurs

Provide customers with additional information that may help them use energy more efficiently, save money and reduce their carbon footprint.

Duke Energy received regulatory approval in late 2008 to implement smart grid technology in Ohio. In 2008 and 2009, we installed approximately 60,000 smart electric meters, 40,000 smart gas meters and 4,000 communication nodes in the state. When our five-year rollout in Ohio is complete, we'll have approximately 700,000 smart electric and 450,000 smart gas meters in service.

We are retooling our smart grid proposal in Indiana after the state utility regulatory commission rejected our initial plan in November 2009. In the Carolinas, we continue with pilot installations. Our smart grid efforts began in the Midwest because our electric meters in the Carolinas were upgraded more recently.

In 2009, the U.S. Department of Energy (DOE) awarded us \$200 million under the American Recovery and Reinvestment Act to support our smart grid projects in the Midwest, and another \$4 million toward our smart grid efforts in the Carolinas. We continue to work with the DOE on finalizing the terms of the grant contracts.



#### Investing in Smart Grid

*Duke Energy is investing up to \$1 billion over the next five years in smart grid technologies.*

