

SoCalGas Advanced Metering Initiative (AMI) Technical Advisory Panel (TAP) Kick-off Meeting

September 9, 2010

Welcome

Patti Wagner, VP of IT Mike Schneider, VP of Customer Operations

Objectives of Today's Meeting

- ✓ Provide an overview of the advanced meter project and your participation as a member of the Technical Advisory Panel (TAP)
- ✓ **Share** our preliminary advanced meter customer outreach & conservation support plan
- ✓ **Obtain** your feedback to update what will be an evolving plan

Meeting Agenda

Topic	Time	Presenter
Welcome & Meeting Objectives	10:00 – 10:15 a.m.	Patti Wagner, VP of IT Mike Schneider, VP of Customer Operations
 About the Technical Advisory Panel (TAP) Introductions Roles & Responsibilities 	10:15 – 10:45 a.m.	Lizette Verduzco, Education & Outreach Mgr
 Advanced Meter Project Overview What is it? Technology and Installation Open Discussion 	10:45 – 11:30 a.m.	Patrick Petersilia, Director of AMI Dave Mercer, Technology Mgr Mario Aguirre, Installation Mgr Chris Olmsted, IT Mgr
LUNCH	11:30 a.m. – 12:15 p.m.	
 Customer Experience & Outreach Public Workshop Page-by-page review of draft plan Open Discussion & Feedback 	12:15 – 1:45 p.m.	Trisha Muse, Customer Experience Mgr Lizette Verduzco, Education & Outreach Mgr
Next Steps & Closing	1:45 – 2:00 p.m.	Patrick Petersilia, Director of AMI

Introductions

Public / Government Agencies

Bob Levin and Tom Roberts, Division of Ratepayer Advocates

Belinda Gatti, CPUC Energy Division

Sommer Harvey, CPUC Business and Community Outreach Group

Dave Hungerford, California Energy Commission

Subject Matter Experts

Steve George, Freeman, Sullivan & Co

Greg Ennis, Wi Fi Alliance

Community Leaders

Forescee Hogan-Rowles, Community Finance Resource Center

Frank Villalobos, Barrio Planners Incorporated

Erin Pak, Korean Health Education Information and Research Center

Charter

- Serves as an advisory group during the deployment of the advanced meter project to provide advice and input to SoCalGas regarding customer and program needs in a cooperative and collaborative fashion
- Draws from the collective expertise of regulatory agencies, technical experts, and community leaders for best practices as they relate to the deployment of the advanced meter project

Your role as a member of the TAP

- Meet bi-annually and around major project milestones (on-going updates via conference call, as needed)
- Provide guidance on strategies or best practices to encourage customer acceptance of new services enabled by the advanced meter technology
- Support the development and implementation of the Outreach & Conservation Plan
- Collaborate on possible solutions if deployment problems arise
- Ensure connectivity between the SoCalGas advanced meter project and other efforts around the state and nation
- Help identify customer and program needs and present new ideas

Advanced Meter Project Overview

Patrick Petersilia, Director of AMI

CPUC Decision (D.10-04-027) Requirements Approved April 2010

- File an advice letter (SoCalGas AL 4110) to establish a balancing account and cost recovery mechanism
- Participate in workshops in Smart Grid OIR R.08-12-009
- Convene a Technical Advisory Panel (TAP)
- By October 4 host a workshop to present a draft plan for AMI outreach and conservation support.
 - Work with Business and Community Outreach (BCO) group to coordinate scheduling of outreach events.
 - Submit plan to Energy Division within 60 following workshop
- File advice letters with executed contracts for AMI technology, installation, and/or system integration
- Establish a system to track and attribute the conservation impacts of AMI.
 Every six months, file a report of measured savings
- Provide customers access to near-real time gas usage and price data concurrent with meter installation

About SoCalGas Customers

A large, diverse group...

- For more than 140 years, SoCalGas has delivered safe and reliable natural gas to customers
- We support 6 million meters and serve over 20 million consumers within 20,000 square miles including 12 counties, 230 cities and 270 communities



- 6% of the Unites States population enjoys the benefits of our gas services
- Approximately half of our customer base speaks a language other than English as their primary language, including Spanish, Cantonese / Mandarin, Korean, and Vietnamese

About the Advanced Meter Project *What is it?*

- Upgrade existing natural gas meters with a wireless communication device
- Advanced meters will automatically read and transmit hourly gas usage information through a two-way communication network to our customer service and billing center
- Provides customers with more frequent and detailed natural gas use information to help identify ways to better control costs and manage gas use



About the Advanced Meter Project *Technology Progress*

A progressive technology project that will enhance the way we deliver service to customers and improve their ability to wisely manage their energy usage

- Has been at utilities implemented across the nation and in other countries
- We are the last of the California utilities but first major natural gas only utility to implement
- Technology will enable future smart technologies



About the Advanced Meter Project *Benefits*

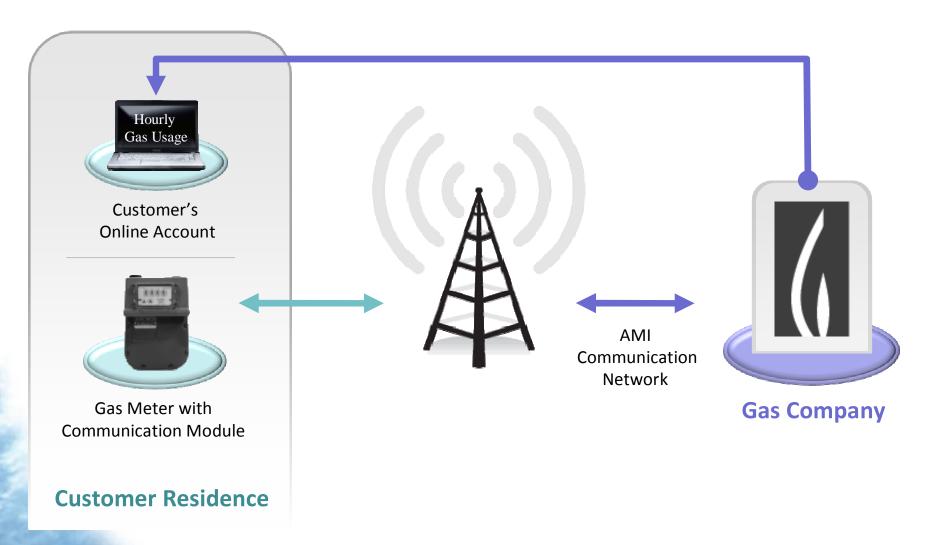
For Customers:

- Helps to better manage their energy use and control expenses
- Ability to better detect gas spikes, which could help them identify a possible gas leak
- Increase customers' privacy and security
- Reduce energy waste and carbon footprint
- Enable future technology e.g., smart appliances
- Improve SoCalGas' operating efficiencies resulting in lower rates for customers
- Ability to leverage the advanced meter communications network

For the Communities we serve:

- Improve air quality by reducing CO₂ emissions by 140K per year
 - 137K tons from energy savings
 - o 3K tons from removing about 1,000 vehicles from the road
- Reduce vehicle traffic eliminating 6.3 million vehicle miles each year
- Provide potential opportunity for water AMI using SoCalGas's network

About the Advanced Meter Project *Upgrading Our System and Access to Your Information*



About the Advanced Meter Project

Technology: Communication Network

- Meter reads are transmitted to the Data Collection Units
- Data Collection Units may be located on phone poles, buildings, etc.
- Meter may communicate with multiple Data Collection Units
- Data Collection Units transmit data to network which communicates to SoCalGas and customers



About the Advanced Meter Project

Technology: Wireless Communication Device

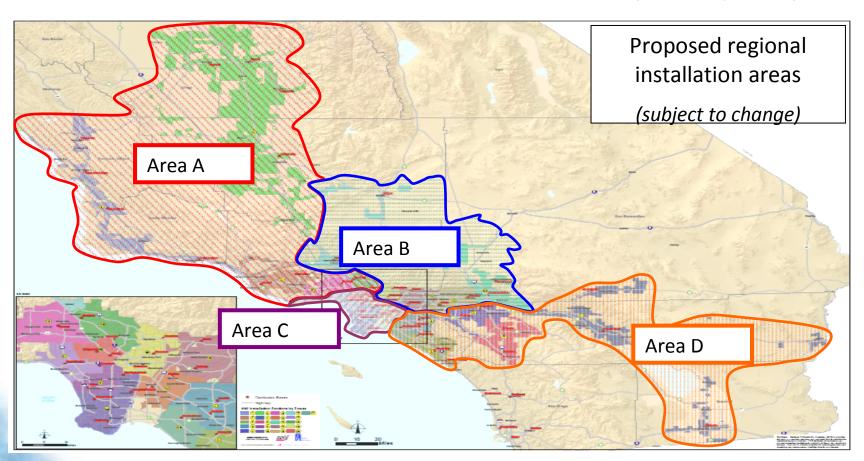
Gas usage is still recorded in the traditional way – it's just a new wireless communication device that transmits the data electronically

- Meter module is installed over the existing natural gas meter and does not change the functionality of the gas meter
 - No remote connect / disconnect capabilities
- Transmits 12 hours of data every 6 hours
 - .01 seconds per transmission (or .04 seconds per day)
 - Battery powered with a 20+ year life
 - Secure data transmission
- Radio frequency transmission less than that of a personal cell phone
- Testing will be conducted before and after installation to ensure accuracy



About the Advanced Meter Project *Installation of the Wireless Communication Device*

Installation of approximately 6 million wireless communication devices on all residential and small to medium business customers may take up to 5 years



About the Advanced Meter Project Installation of the Wireless Communication Device

- A typical installation will take less than 15 minutes with no interruption in gas service
- About 1 in 3 customers will require a meter change as part of upgrading meters or normal maintenance
 - Less than 2% of customers will experience a service interruption
- Installation testing starts in late 2012, with mass installation beginning in Q1 2013 through 2017

About the Advanced Meter Project

Timeline

2010 2011 2012 2013 2014-2017

Pre-Installation

- Select vendors and build technology
- Develop customer communication plans
- Conduct customer research, workshops and meetings to secure feedback
- Determine technology requirements and build technology infrastructure (2010-2013)

Test

Advanced Meter Full Installation

- Launch communications to prepare customers for installation experience
- Conduct comprehensive testing of technology and equipment (Q3 2012)
- Begin full implementation rollout (2013-2017)

On-going customer feedback and refinement of plans

Q&A

Customer Experience & Outreach

Trisha Muse, Customer Experience Manager Lizette Verduzco, Education & Outreach Manager

Customer Experience & Outreach Public Workshop

- Scheduled for 10/4 at the Energy Resource Center in Downey, CA
- Purpose: to present the working draft of the customer outreach and conservation support plan and secure feedback
- The workshop will include:
 - Marketing and education elements to prepare customers for the advanced meter roll-out
 - Mock ups of web-based gas usage information
 - Hard copy conservation materials for non-web based customers
 - Strategies to channel customers towards energy efficiency offerings
 - Outreach strategies for all market segments including ethnic, minority and hard-to-reach communities and businesses

Working Draft

As we review the plan...

- Take notes and write down your questions. We've allotted time at the end for discussion.
- Think about the following:
 - Is it customer focused? Will our approach help create a positive customer experience?
 - Is it inclusive? Will our approach reach our hard-to-reach customers?
 - Customer options for accessing gas usage information
 - Strategies for helping achieve 1% conservation goal

Customer Outreach and Conservation Support Plan *Guiding Principles*

Create a Positive Customer Experience	Always adopt a customer-centric view across the entire SoCalGas territory and AMI program
Be Collaborative	Work with stakeholders to design, respond to and improve the customer experience, products and services
Provide comprehensive service offerings	Offer information about all relevant SoCalGas services to deliver a more beneficial customer experience
Leverage Existing Knowledge	Leverage utility proven practices and academic research; don't reinvent the wheel
Be Inclusive	Tailor outreach and communications for under-served and hard-to-reach groups
Be Transparent	Respond promptly and transparently to all inquiries

Customer Outreach and Conservation Support Plan *Built on Customer Input & Proven Practices*

- Van Denburgh Consulting Group, who has worked with utilities over the past three years to define, enable and provide feedback of the AMI customer experience, will be providing advice and oversight during the SoCalGas AMI program
- AMI Outreach and Conservation Support Plan was based on the following inputs:
 - Customers
 - Focus groups
 - On-line panels
 - Public outreach meetings
 - Feedback and lessons learned from other utilities
 - Academic research in field of customer behavior

This draft plan will be modified from feedback obtained throughout the AMI project

Customer Outreach and Conservation Support Plan 2010 Research Efforts

- Conducted 22 customer focus groups in June 2010 representing:
 - Residential (including: limited-income, web savvy and non-web savvy, renters, homeowners, environmentally conscious)
 - In-language groups in Spanish, Cantonese, Mandarin, Korean and Vietnamese
 - Small & medium businesses
- Online Surveys conducted in July and August representing:
 - 262 businesses
 - 253 residential customers
- Phone Surveys scheduled for Q4 2010

Customer Outreach & Conservation Support Plan *Objectives*

- Increase customer awareness of AMI; educate about its impact and benefits to them, and its benefits to the environment
- Support customer behavior change with respect to reducing energy waste

Customer Outreach and Conservation Support Plan *Key Audience*

- Residential Customers
- Small / Medium Business Customers
- Hard-to-Reach / Special Needs Customers
 - Ethnic
 - Hispanic; Mandarin/Cantonese; Vietnamese; Korean
 - Rural
 - Fixed Income
 - Disabled
 - Seniors

Analysis will be done on demographics of installation community

- Elected Officials
- Regulators
- Consumer Advocates
- Media

3 Phased Customer Experience

Phase 1: Pre-Installation "Awareness"

2010-2017

Phase 2:

During Installation Prepare Customers

90/60/30 Days

Between 3 to 5 years

Phase 3:

Post Installation
Enable Customers to
Conserve

2013 and beyond

Gather on-going input/feedback and refine plans

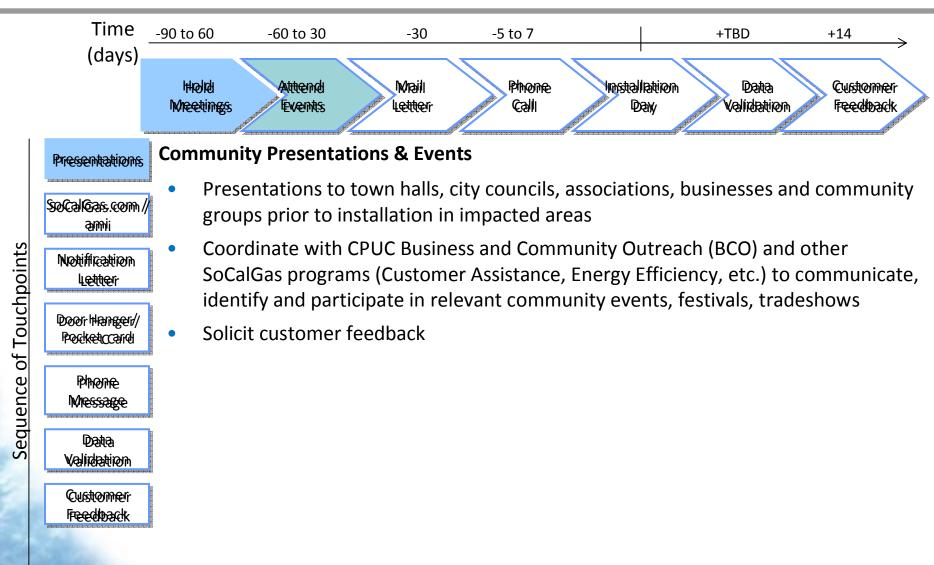
Customer Outreach and Conservation Support Plan On-going Feedback

- Customer Focus Groups and Surveys (online & phone)
- Public Workshops and Community Forums:
 - Advanced meter Community Panel
 - Technical Advisory Panel (TAP)
 - SoCalGas Community Advisory Council (CAC)
 - Public workshops & community forums
 - Meetings with regulators, advocates and elected officials
- Email/Web
- Inbound Calls
- Antidotal

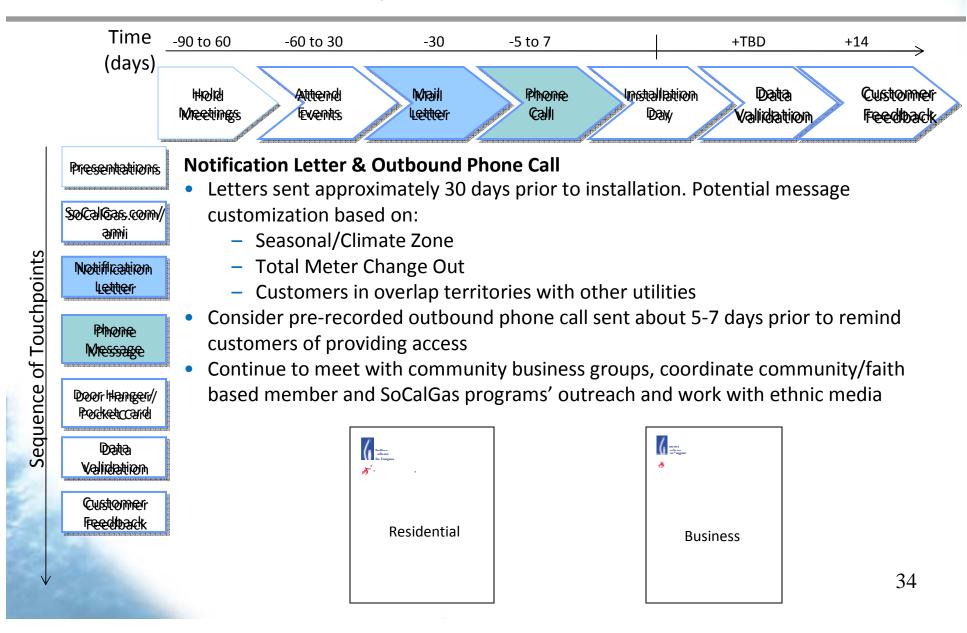
Customer Outreach and Conservation Support Plan Customer Pre-installation Experience

- Leverage existing Residential and Business communications to reach a broad customer base:
 - SoCalGas Bill Package
 Bill inserts/onserts; SoCalGas Newsletter; Bill and envelope messages
 - SoCalGas Online / Email
 E-news articles; Web: Socalgas.com/ami; My Account (online billing/payment service)
 - Person-to-Person
 Customer Contact Center support; Presentations at meetings / events
 - Media
 Educational stories in local media (print, broadcast and/or online)
- Supplement and tailor communications for hard-to-reach and special needs customers
 - Ethnic media coverage (earned and paid)
 - Community-based organizations
 - Faith-based organizations
 - County-specific Community Action Partners

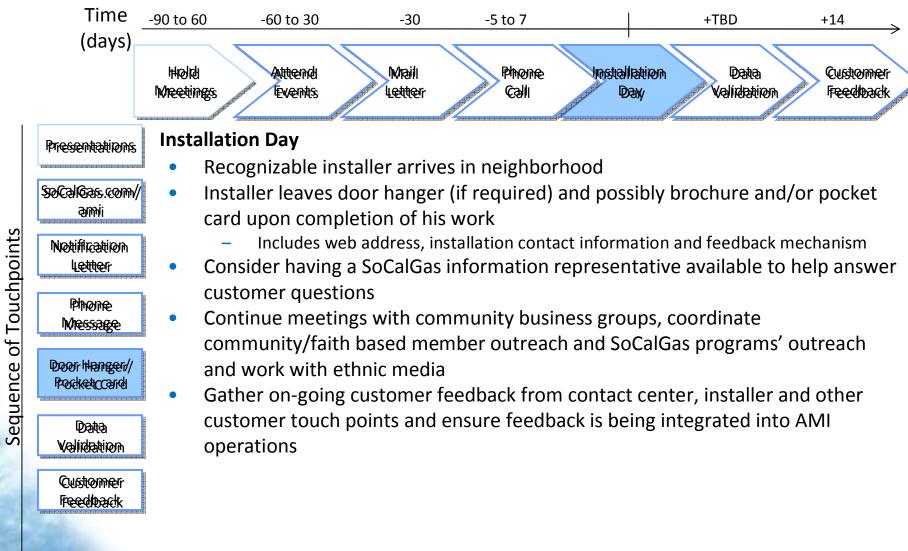
Customer Installation Experience



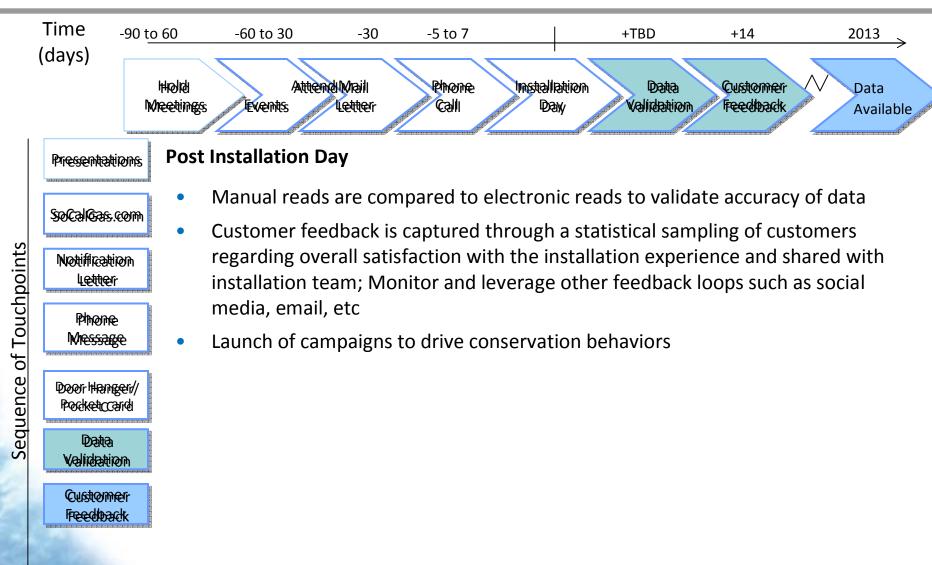
Customer Installation Experience



Customer Installation Experience



Customer Post-Installation Experience



Customer Outreach and Conservation Support Plan

Conservation Support Strategies

Focus

- High usage customers
- High likelihood "to save" customers
- Previous "touched" customers
- Hard-to-reach segments
- Third-party partnerships e.g.,
 Southern California Edison or
 Home Area Network users

Collaborate

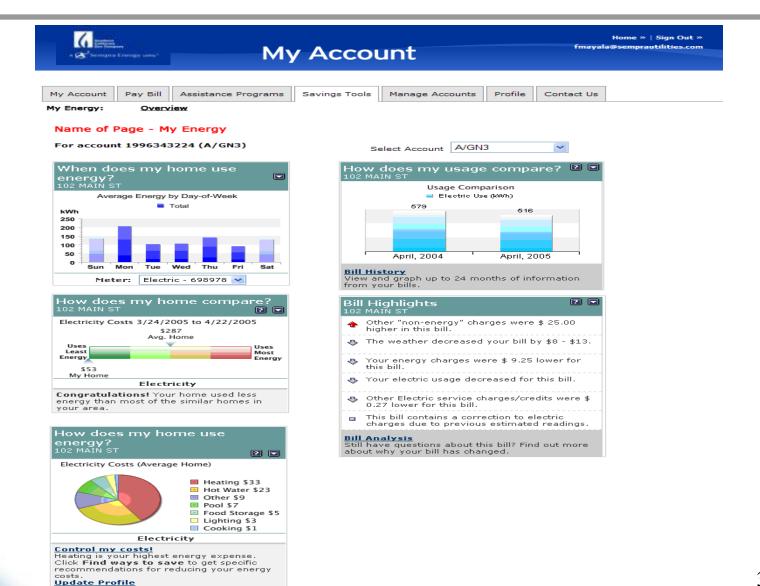
- Leverage successful SoCalGas programs to accelerate engagement (e.g. MyAccount, CARE)
- Integrate with EE programs; provide savings options throughout

Innovate

- Identify and offer future products/services
- Invest in pilots to test tools that support these principles of customer behavior change
- Test social norming, feedback and goal setting
- Investigate rewards

Information & Tools to Drive Conservation

Online Presentment



Information & Tools to Drive Conservation

Other Potential Access Options

- Energy Alerts
- IVR
- Paper
- Mobile Applications
- In-home Devices/Home Area Network

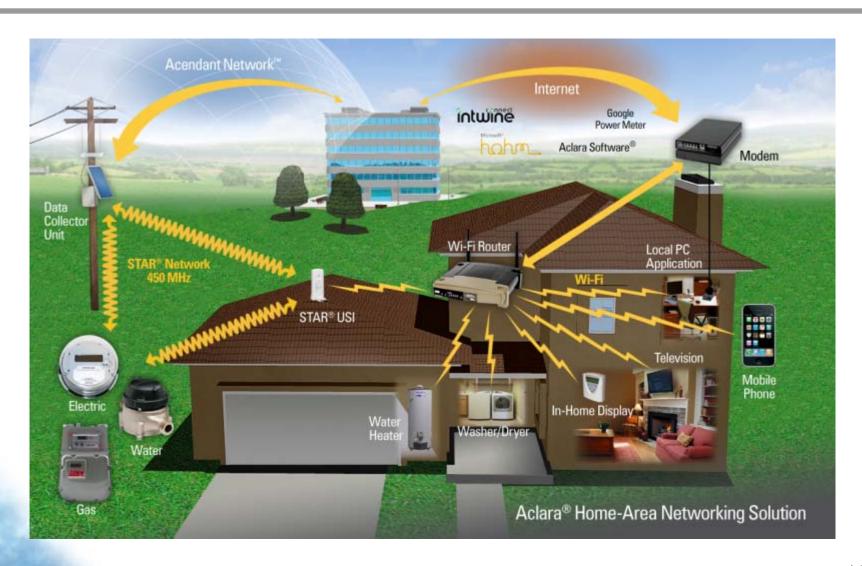
Long Term Plans

Data Access and Program Integration

- Provide customers with options for accessing their gas usage data
 - Enable 3rd party service providers to display meter data (i.e., Google, Microsoft, etc)
- Integration Electric & Water usage information
- Pilot opportunities:
 - Integration with appliance manufacturers
 - Field testing in-home displays and appliance monitoring technology
 - Working with Customer Assistance and Energy Efficiency programs

Long Term Plans

Future Technology



Customer Outreach and Conservation Plan *Measures of Success*

- Customer & Community Experience
 - Measurement of knowledge and feedback on value
- Installation and Services
 - Safety
 - Mitigation of Installation Complaints
 - My Account Online Payment Service Enrollments
 - Usage Alerts Opt-ins
- Conservation Measurement

Customer Outreach and Conservation Support Plan Summary

- Focuses on communication to customers at the right time and right place and builds awareness through communities
- Establishes an ongoing customer dialogue with improvements to operations and communications as they are identified
- Team behind plan believes success is an iterative process
- Inclusiveness of hard-to-reach and special needs customers is a key component
- Reduction of energy waste is the long-term goal of the customer effort

Discussion & Feedback

Next Steps

- Update draft Customer Outreach & Conservation Plan
- Present draft plan at Public Workshop on 10/4 at SoCalGas' Energy Resource
 Center in Downey
- Schedule follow up TAP meeting to review final draft plan prior to filing during week of 11/1
- Submit draft Customer Outreach and Conservation Support Plan to the CPUC Energy Division by 12/4

Contact Us / More Info

- Pat Petersilia, Director of the Advanced Meter Project ppetersilia@semprautilities.com or 213-244-5167
- Lizette Verduzco, Stakeholder Education & Outreach Manager lverduzco@semprautilities.com or 213-244-4427
- Trisha Muse, Customer Experience Manager tmuse@semprautilities.com or 213-244-4421
- Advanced Meter webpage on SoCalGas.com: www.socalgas.com/ami
- General Project Email:
 SCGAMIProject@semprautilities.com

Closing & Thank You

Appendix

Customer Experience & Outreach Residential Research Findings

According to our online survey panel:

- 70% said that having their daily gas use information (in dollars) would help answer questions regarding their gas bills
- 66% said this would help them manage their household budget
- 65% said this would influence their use of natural gas in their home
- 65% said having this information would make them interested in viewing it more frequently (beyond once a month)
- 93% said they would prefer to access their gas usage information through My Account at socalgas.com; most would view monthly or weekly
- 74% would prefer to be alerted via email alerts (vs. txt, phone, other); 16% don't want an alert.

From both online and focus groups:

- Most customers wish to access their usage information online or via email
- Customers want to be able to sign up for alerts to notify them if their gas usage spiked or exceeded a value, determined by the customer. Most want this alert via email
- Customers want to know how this information can help save them gas or money; and how to access the information
- Customers valued the ability to set an energy alert if their usage spiked, so they could better monitor their gas use and potentially identify a gas leak at their home

Customer Experience & Outreach

Business Research Findings

According to our online survey panel:

- 71% said that having access to their business' daily natural gas usage (in dollars) information would help answer questions regarding their gas bill
- 60% said having this information would also help them manage their business' budget
- 58% said it would make them more interested in viewing their information more frequently (more than once a month)
- 45% said it would influence their use of natural gas in their business
- 81% said they would prefer to access their business' gas usage information online at socalgas.com; most would view monthly or weekly
 - Of those would prefer to receive their information in another way (besides socalgas.com), the next preferred methods were: a visual display; through another online method such as Google, Microsoft; by phone; through a smart phone application, etc.
 - 75% of customers would prefer to be alerted via email alerts; 16% do not want an alert
- 75% of customers want to know how to access the monthly usage information

Customer Experience & OutreachBusiness Research Findings

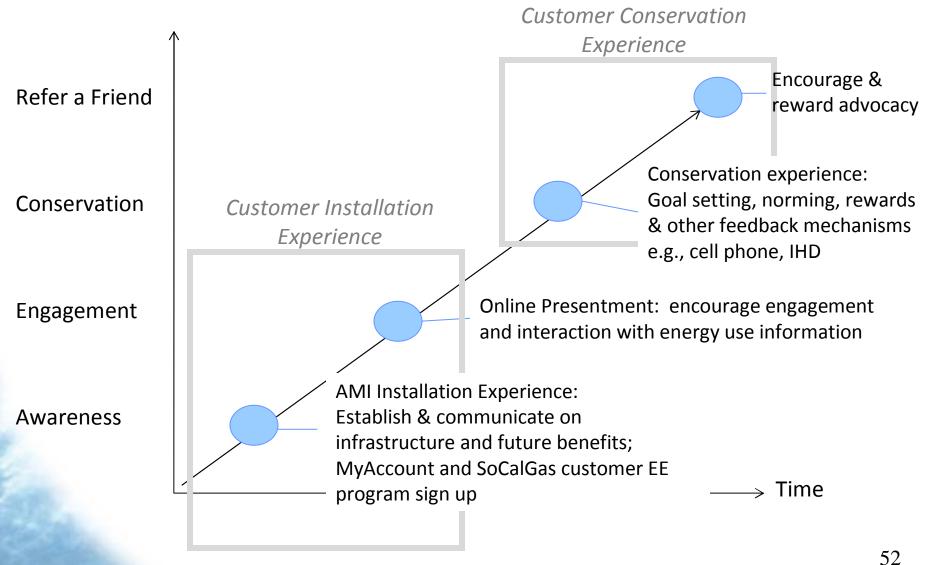
According to feedback from the focus groups:

- Segments with high gas usage like large property owners, restaurants and laundry/dry cleaners are likely to be the ones most interested in learning how the new technology will benefit them
 - Restaurants were the most interested segment in using the new technology to track usage/costs for individual business locations and individual pieces of equipment

From both online and focus groups:

- Most businesses prefer to access their daily usage online on socalgas.com
- Business customers prefer be alerted via email alerts
- Most businesses listed the following as top benefits:
 - Having the ability to better control their business expenses/save money
 - Knowing how much gas each appliance/equipment uses
 - Having the ability to monitor if there's a spike in gas usage that could be related to a gas leak

Customer Outreach and Conservation Plan A Conservation Journey



Customer Outreach and Conservation Support Plan Snapshot of Conservation / Behavior Change

Gas Usage Feedback

"Domestic energy consumption is still largely invisible to millions of users and this is a prime cause of much wastage. Feedback on consumption is necessary for energy savings. It is not always sufficient – sometimes people need help in interpreting their feedback and in deciding what courses of action to take – but without feedback it is impossible to learn effectively."

Darby, Sarah, (April 2006), The Effectiveness of Feedback on Energy Consumption, Environmental Change Institute,

University of Oxford, page 17

Note: I'd like to add something about Prius owners and their obsession with the feedback they get to optimize fuel efficiency

Community Based Groups & Information Web Formats

"Due to their localized and tailored content, grassroots and community-based groups, as well as information-driven web formats, have a strong role in helping to mobilize segments to action and to generate a *behavior change*, above and beyond the limited, awareness-generating capacity of mass media."

Opinion Dynamic Corporation (December 10, 2009), Market Segment Findings, *Memorandum to California Public Utilities Commission, Executive Summary*

Social Norming

"A second important implication of this analysis is that it adds to recently-growing appreciation of how non-price interventions can affect consumer behavior. Economists in general, and energy efficiency program managers in particular, have historically focused on how prices and subsidies affect demand. The idea that simply being sent a letter in the mail could result in measurable changes in demand is remarkable, especially given that the letters may not have improved consumers information sets in a relevant way ... "

Alcott, Hunt (August 4, 2009), Social Norms and Energy Conservation,, Abstract

Goal Setting

Can achieve as high as 15% energy savings through this goal setting as a behavior change strategy. CPUC 2009 Presentation by Karen Ehrhardt-Matrinez, Research Associate, ACEEE [need to get Karen to approve statistic]

Post-Installation Energy Presentment & Home Area Network Roadmap

