



Proactive Customer Communications

Using Automated
Multi-Channel
Communication as Part
of a Successful Adoption
of AMI/Smart Grid

Twenty First Century Communications, Inc.
750 Communications Parkway
Columbus, Ohio 43214
614-442-1215
www.tfcci.com

Confidential and Proprietary Information

The material and information contained in this document are the proprietary and confidential property of Twenty First Century Communications, Inc. and are not open to the public. Reproduction and / or disclosure of any kind are prohibited, except as authorized.

Executive Summary

This paper outlines several important steps utilities can make in order to implement a successful AMI/SMART Grid Communication program. By reading this paper, you will learn:

1. The four biggest AMI/Smart Grid communication issues.
2. How proactive outbound communications can improve customer service and dramatically lower costs, along with 11 key benefits.
3. Five tips for implementing a successful AMI/Smart Grid communication program.

Background

According to the U.S. Department of Energy, “The electric industry is poised to make the transformation from a centralized, producer-controlled network to one that is less centralized and more consumer-interactive. The move to a smarter grid promises to change the industry’s entire business model and its relationship with all stakeholders, involving and affecting utilities, regulators, energy service providers, technology and automation vendors and all consumers of electric power.”

AMI: Advanced Metering Infrastructure

AMI is a term denoting a system of advanced “smart” electric meters that collect, measure, record, and save usage data in regular time increments, and provide the usage data to both consumers and utilities. This allows companies to be aware of and respond more quickly to potential power problems, and to communicate real-time electricity prices to consumers. These price signals provide consumers with financial incentives to reduce their electricity usage.

Smart Grid:

AMI is a critical component of the new Smart Grid, which includes new communications networks, database systems, transmission networks, and more – all of which when combined will modernize our nation’s electrical grid and provide many important benefits to electric companies and consumers.

Today's Grid, And Tomorrow's¹

Characteristic	Today's Grid	Smart Grid
Enables active participation by consumers	Consumers are unformed and non-participative with power system	Consumers are unformed and non-participative with power system
Accommodates all generation and storage options	Dominated by central generation - many obstacles exist for distributed energy resources interconnection	Many distributed energy resources with pug-and-play convenience focus on renewables
Enables new products, services and markets	Limited wholesale markets, not well integrated - limited opportunities for consumers	Mature, well-integrated wholesale markets, growth of new electricity markets for consumers
Provides power quality for the digital economy	Focus on outages - slow response to power quality issues	Power quality is a priority with a variety of quality / price options - rapid resolution issues
Optimizes assets and operates efficiently	Little integration of operational data with asset management - business process silos	Greatly expanded data acquisition of grid parameters - focus on prevention, minimizing impact to consumers
Anticipates and responds to system disturbances (self-heals)	Responds to prevent further damage - focus is on protecting assets following fault	Automatically detects and responds to problems - focus on prevention, minimizing impact to consumer
Operates resiliently against attack and natural disaster	Vulnerable to malicious acts of terror and natural disasters	Resilient to attack and natural disasters with rapid restoration capabilities

¹The Smart Grid: An introduction. Prepared for the U.S. Department of Energy by Litos Strategic Communication under contract No. DE-AC26-)4NT41817, Subtask 560.01.04

AMI/Smart Grid Communication Issues

Issue #1 - Everybody wants more information

Historically, most consumers have paid little attention to energy usage. From “green” practices, to heeding energy-saving tips from their utilities, to anything else related to energy, the general consensus was that energy was cheap, abundant, and out of mind.

People are interested in Smart Grid but are not getting info from their utilities.

Today, recent research shows that this consumer apathy is changing significantly. Studies conducted by Energy Insights in 2007 shows that utility customers are interested in opportunities made available by the Smart Grid. Energy Insights’ research also shows that 70% of respondents expressed “high interest” in a smart meter device that keeps them apprised of their energy use as well as dynamic pricing.

So the good news is that utility customers are very interested in energy efficiency. The bad news is revealed in a recent J.D. Power study² that shows less than one in six residential customers feel informed about what their utility’s Smart Grid efforts are. The big upside from the J.D. Power study is that those customers who are kept apprised of their utility’s actions in this area are “considerably more satisfied with their service than those consumers who are in the dark.”

While there will always be some customers who will continue to be uninterested in energy savings, there are many more customers who will want to be involved in managing how and when they use energy, and how much they pay for it.

Consumers are skeptical...and generally want more information

...resistance to change that can be overcome if customers are effectively engaged before, during and after the smart meter installation.

Other customers are skeptical about AMI and Smart Grid, or even oppose it. The key to overcoming this skepticism is creating an on-going dialog with customers. According to a 2009 IQPC interview with National Grid³, “Experience from National Grid

programs to date indicates there is significant resistance to change that can be overcome if customers are effectively engaged before the installation on the day of the installation and after the installation.”

Bottom Line

Customers demand information and resources to make informed decisions. Whether people are keenly interested in AMI and Smart Grid or are skeptical, one of the most critical components to success is providing customers with information. Additionally, as

² J.D. Power & Associates’ 2010 Electric Utility Residential Customer Satisfaction Survey

³ Patrick Hogan, “Smart Grid Implementation Summit”, IQPC Conference, McLean, VA, August 17-19, 2009

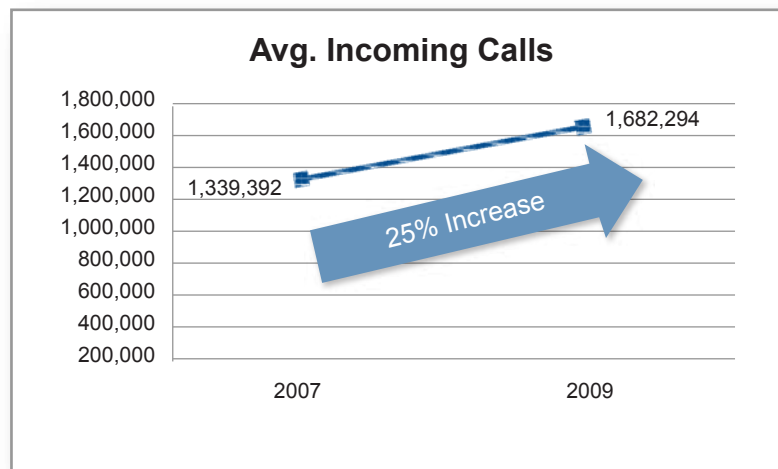
customer service channels and communication expand across all industries, customers are impatient with companies that only offer non-interactive one-way communication or even no communication at all.

As AMI and Smart Grid initiatives start to be planned, developed, and implemented, there is much information to be communicated to stakeholders over many months, or even over many years.

- Lack of communication can lead to many problems, such as poor employee and customer buy-in, negative media relations, negative regulatory relations, and misinformation among front line employees.
- Well-planned communication with customers can even be part of the make or break decision by commissions to approve, delay, or deny AMI/Smart Grid projects. For example, one key reason the Maryland Public Service Commission approved Baltimore Gas & Electric's Smart Grid project in August 2010 was BG&E's commitment to customer communication and education (BG&E press release August 16, 2010).

Issue #2 - Call Center Traffic Continues to Grow

The latest industry average for incoming calls is 1,682,294 a year, an increase from 1,339,392 in 2007. According to data Chartwell collected in late 2009 from utility contact centers, 57.6% of utilities experienced an increase in call volume.



Issue #3 - The Length and Complexity of Calls Continues to Grow

Additionally, Chartwell⁴ reports that the length of calls to the call center is also increasing. And this is expected to increase dramatically over time as phases of AMI and Smart Grid

⁴ Chartwell's September 2010 'Customer Care Series: Contact Center Staffing' report and August 2010 Next-Generation Customer Contact Centers report

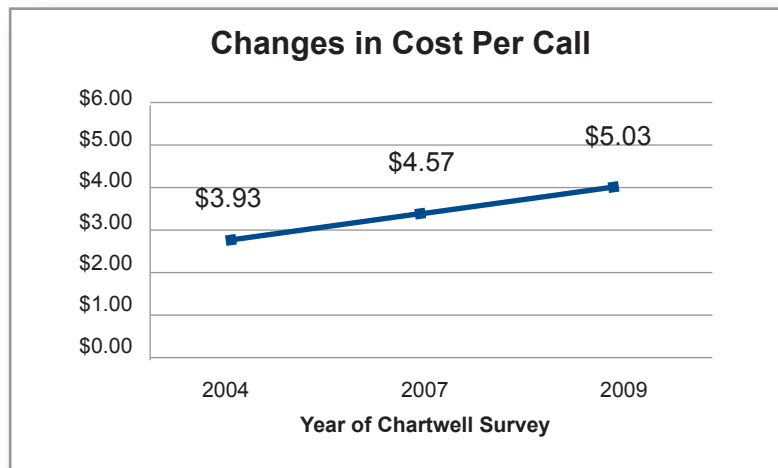
initiatives are implemented. Calls will be longer, with customers looking to front line employees as subject matter experts, not just routine call processors.

In addition to calls about outages, bill payments and service changes, there will be calls about:

- How (or if) AMI and Smart Grid initiatives benefit customers
- How customers can save money through efficiency programs
- How customers use new technologies such as demand-response devices, programmable thermostats, home area networks, Web dashboards and other utility-sponsored or partner-sponsor devices, and more

Issue #4 - Average Cost per Call Continues to Rise

According to Chartwell⁵, the cost of an agent taking a call is usually estimated to be in the \$4-\$5 range, while calls, texts, and emails can be only pennies per message. While call center agent salaries continue to rise over time, costs to make automated phone calls, SMSs (text messages), and e-mail continue to fall.



⁵ Chartwell's July 2010 Customer Care Series: Contact Center Cost Per Call

Solution - AMI/Smart Grid Proactive Customer Communications

Proactive AMI/Smart Grid Communication Lowers Costs

Utilities often experience call center spikes immediately after smart meter installation due to concerns about over-billing. A majority of these calls can be avoided by proactively letting customers know that their new meter may be more accurate than their old meter, so bills may increase slightly.

Installing meters just as summer heat or winter cold begins to set in may trick customers into thinking their higher bills are due to the new advanced meter, not increased usage. Proactive communications in situations like these can head off a lot of call center traffic.

...proactive communication can head off a lot of expensive call center traffic.

Similarly, you can help head off questions about information security, radio frequency and electromagnetic radiation safety, and other common questions related to AMI by making proactive calls, texts, and email in addition to making the same information available online and in print.

Communicating corporate stances, plans, schedules, and more in a unified way can be inexpensive and easy. Regular, unified, and repeated communications should be part of your overall strategy. While AMI and Smart Grid concepts are fully understood by utilities, customers have a long way to go before they fully understand and embrace AMI/Smart Grid - especially as news articles about customers lashing back at such initiatives still persist.

Proactive Communication Benefits

Just like location, location, and location are the keys to success in real estate, communication, communication, and communication are the keys to success in implementing new AMI/Smart Grid initiatives. Communication from the beginning of AMI/Smart Grid discussions through the development and implementation phases will help relations with employees, customers, the media, regulators, stockholders, and more. Proactive communications will:

1. Increase employee engagement
2. Improve employee knowledge
3. Strengthen customer service, satisfaction, and trust
4. Improve adoption rates of new programs (AMI/Smart Grid, or others, such as billing or Web portal programs)
5. Reduce load and help customers save money during peak time rates
6. Help head off increases in call center and IVR traffic
7. Improve media knowledge and relations
8. Strengthen rates cases
9. Increase community visibility
10. Strengthen consumer advocacy group and environmental group relations
11. Create opportunities for school educational programs

Types of AMI/SMART Grid Communication

Using automated mass notification, utilities can communicate AMI, Smart Grid and other related topics to customers, employees and the community via land line, SMS text message (including 2-way), and e-mail. Listed below are numerous possible AMI/Smart Grid message types:

Customer, Community & Employees

- Customer and community impact (consumer savings, better outage management, improved customer communications, access to home wireless Internet, reduced emissions, job creations, increased grid security, etc.)
- Updates on how initiatives have helped save consumers money individually or as a community (start/stop/transfers cost less, meter reading costs less, reduced energy theft)
- Updates on meter installations and infrastructure improvements
- Updates on regulatory hearings
- Utility's planned position/project definition near-term and long-term; public outreach and awareness of energy-efficiency programs
- Website awareness

Customer & Community

The entire above plus:

- Budget/Level billing availability
- Curtailment requests
- Demand response/peak day notices
- Disconnect notices
- Energy efficiency and audits; educational programs
- Meter replacement confirmation after job is done, and 60-90 day and 90-120 day follow-up
- Month-to-date energy usage
- One month and two week meter replacement notice, especially for special needs/life support customers
- Outage and restoration updates, changes in ERT, and power-on verification
- Outage apologies
- Prepaid reminders
- Service add-ons (dashboards, demand response, smart appliance partnerships, net metering, efficiency programs, efficiency devices, etc.)
- Start/stop/transfer confirmation
- Welcome calls with program information

Customer Only

The entire above plus:

- Disconnect notices
- Month-to-date energy usage
- Prepaid reminders
- Start/stop/transfer confirmation
- Welcome calls with program information

AMI/Smart Grid Communication Tips

Proactive Communications Tip #1 -- Develop an AMI/Smart Grid Communication Plan

To help plan the stages of communication, establish a time line of AMI/Smart Grid milestones, and incorporate updates and follow-ups if there are long gaps between milestone dates (six months or more). Other automated messaging & communication plan tips include:

- Build an online library of press releases, fact sheets, brochures, media briefings, stockholder information, and key project staff biographies.
- Include AMI/Smart Grid updates and automated messaging sign-up info on bills, bill inserts, media releases, community speeches, signage, inbound IVR queue messaging, print publications/newsletters, and surveys.
- Create training materials for the front line staff, and special communications directed at first-time customers.
- Communicate a consistent message across all channels available to customers and stakeholders.

See www.tfcci.com for sample message scripts and audio files for many different types of messages; links to a demo sign-up page; and links to a desktop and mobile website for reporting outages, obtaining status updates, obtaining payment amounts due, making payments, and more; and a sample communications plan template.

Proactive Communications Tip #2 -- Use Automated Mass Notification Technology

Mass notification systems like TFCC Alert® can proactively keep everyone informed and engaged via automated messages. TFCC Alert is a high-speed, high-volume notification system that lets you reach your customers anytime, anywhere on any device with important information.

All that's required is a little planning and setup in the beginning. Once the automated messages are created, there's minimal to no involvement needed on your part. Sending messages is as simple as uploading a file of customer contact information, or just letting the utility's OMS, CIS, or other systems automatically launch notifications through an FTP or web service interface.

Proactive Communications Tip #3 -- Build an Opt-In Site

Since texting people first requires their permission via an opt-in, TFCC can help you obtain that opt-in permission by building and hosting a sign-up where customers or anyone else can opt-in to receive any or all types of notifications that your organization offers, and people who have signed up can return to update their contact information or opt-out if desired.

Proactive Communications Tip #4 -- Use Social Media

Take advantage of social media. Supplement outbound information with Facebook and Twitter updates for your utility; desktop corporate website and mobile website functionality, such as outage reporting and status updates, bill due date and amount due, and meter reading; and online outage maps.

Proactive Communications Tip #5 -- Automate C&I Communication

If your organization tries to handle commercial and industrial customers with a lot of personal account manager contact, automated messaging can supplement personal communications, getting more information into C&I customers' hands more quickly. This opens the door to C&I customers for more efficient and less time consuming two-way communication with you. Instead of checking voice mail messages and returning calls between meetings, they can reply back if needed at their convenience, and account managers can always follow up later, after customers have received and digested the information at their convenience.

Additional Resources

For more information on Twenty First Century Communications' entire Utility Communication Solutions, visit www.tfcci.com.

- Proactive Outbound Communications for Utilities video, case study & literature
- ETC.coop story: "Survey Findings Mixed on Smart Grid" July 2010

Contents

Executive Summary	3
Background	3
AMI: Advanced Metering Infrastructure	3
Smart Grid	3
Today's Grid, and Tomorrow's	4
AMI/Smart Grid Communication Issues	5
Issue #1 - Everybody Wants More Information	5
Issue #2 - Call Center Traffic Continues To Grow	6
Issue #3 - The Length and Complexity of Calls Continues to Grow	6
Issue #4 - Average Cost per Call Continues to Rise	7
Solution -- AMI/Smart Grid Proactive Customer Communications	8
Proactive Communication Benefits	8
Types of AMI/Smart Grid Communications	9
AMI/Smart Grid Communication Tips	10
Proactive Communications Tip #1 - Develop an AMI/Smart Grid Communication Plan	10
Proactive Communications Tip #2 - Use Automated Mass Notification Technology	10
Proactive Communications Tip #3 - Build an Opt-In Site	10
Proactive Communications Tip #4 - Use Social Media	11
Proactive Communications Tip #5 - Automate C&I Communication	11
Additional Resources	11