



City of Killeen Public Relations & Pilot Program City Council Results Presentation

Presented by: Mark Windus and Nicole Griffin



Date: February 2, 2016

UtiliWorks™

Agenda

- Introductions
- Public Relations & Education Campaign Overview
- Pilot Program Strategy
- Q&A



Public Relations & Education Campaign Tasks

- The campaign consists of the following tasks:

- Define Objectives
- Define Target Audience
- Determine Applications
- Develop a Campaign Strategy
- Define Methods to Analyze Campaign Results
- Implement
- Analyze Results

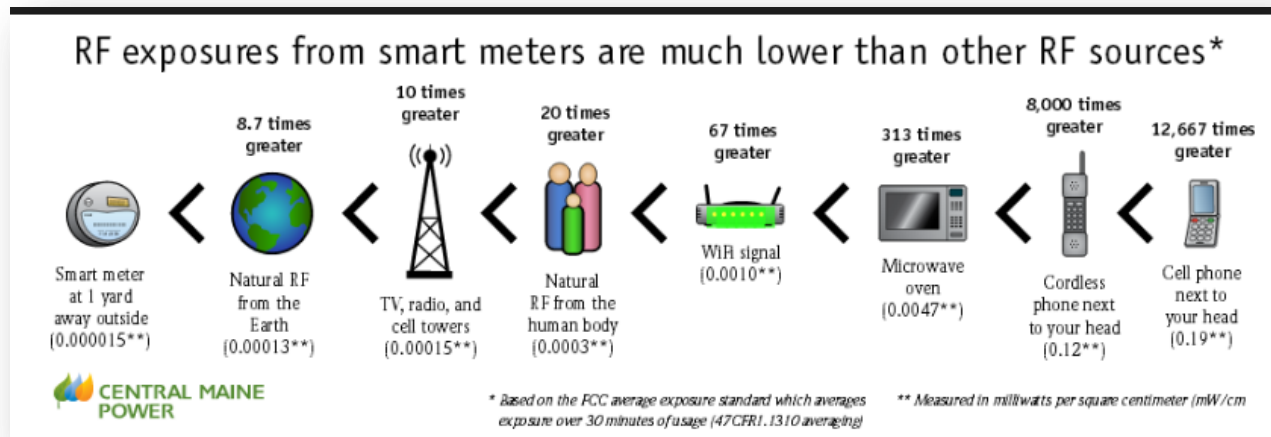
WBS	Task Name	% Complete	Duration	Start	Finish
0	BELCO AMI Public Awareness Campaign	10%	267d	Thu 10/30/14	Wed 11/25/15
1	Program Development	100%	42.5d	Thu 10/30/14	Fri 1/9/15
1.1	Project Start Milestone	100%	0d	Thu 10/30/14	Thu 10/30/14
1.2	Develop Public Awareness Campaign	100%	8.5w	Thu 10/30/14	Fri 1/9/15
1.3	Public Awareness Campaign Accepted	100%	0d	Fri 1/9/15	Fri 1/9/15
2	Prepare and Deliver Monthly PR Status Reports (Executive Steering Committee and Steering Committee Reports)	0%	192d	Fri 2/6/15	Fri 11/6/15
3	Organizational Awareness and Training	0%	234d	Mon 12/1/14	Fri 11/6/15
3.1	Timeline & Benefits Meeting (Company Wide)	0%	7d	Mon 3/23/15	Tue 3/31/15
3.2	Educate Department Heads on Areas of Concern	0%	103d	Mon 12/1/14	Mon 5/4/15
3.3	Monthly Department Meeting- AMI Project Updates	0%	192d	Fri 2/6/15	Fri 11/6/15
3.4	Monthly Intranet AMI Project Status Updates	0%	192d	Fri 2/6/15	Fri 11/6/15
3.5	Update FAQ Based on Feedback from BELCO Staff	0%	10d	Tue 5/12/15	Tue 5/26/15
3.6	FAQ Updated and Circulated to Employees	0%	0w	Tue 5/26/15	Tue 5/26/15
3.7	Organizational Awareness and Training Complete	0%	0d	Tue 5/26/15	Tue 5/26/15
4	Customer Communication	0%	208.28d	Wed 1/28/15	Fri 11/20/15
4.1	Alpha Pilot	0%	72.5d	Wed 1/28/15	Mon 5/11/15
4.1.1	Alpha Pilot Start Milestone	0%	0d	Mon 2/16/15	Mon 2/16/15
4.1.2	Communication Prior to Pilot Installation	0%	34.5d	Wed 1/28/15	Wed 3/18/15
4.1.2.1	Develop Advanced Metering Brochure	0%	3.5w	Wed 1/28/15	Fri 2/20/15
4.1.2.2	Develop/ refine FAQ for BELCO's website	0%	2w	Wed 3/4/15	Wed 3/18/15
4.1.2.3	Setup Smart Meter Demonstration Site at the Utility	0%	5d	Wed 3/11/15	Wed 3/18/15
4.1.2.4	Advanced Metering Brochure distributed	0%	0d	Wed 3/18/15	Wed 3/18/15
4.1.2.5	FAQ Updated/ Published on BELCO's Website	0%	0d	Wed 3/18/15	Wed 3/18/15
4.1.2.6	Smart Meter Demonstration Setup Complete	0%	0d	Wed 3/18/15	Wed 3/18/15
4.1.3	Recruit Beta Pilot Participants	0%	60d	Mon 2/16/15	Mon 5/11/15
4.1.4	Communication PostPilot Installation	0%	5d	Tue 4/14/15	Tue 4/21/15
4.2	Beta Pilot	0%	165.78d	Mon 3/30/15	Fri 11/20/15
5	Project Management	0%	229d	Mon 1/5/15	Wed 11/25/15
6	Full Deployment Start Milestone	0%	0d	Wed 11/25/15	Wed 11/25/15

- Following this methodology, UWC has implemented numerous successful public relations campaigns.

- Recent projects include: City of Long Beach (CA), City of Ruston (LA), Orangeburg DPU (SC), BELCO (Bermuda), City of Monroe (LA)

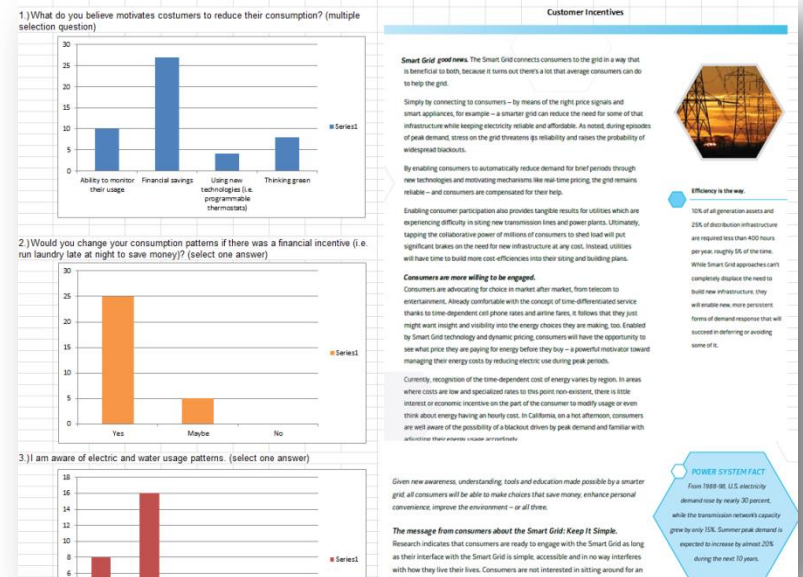
Define Goals & Objectives

- Increase positive perception of the utility
- Educate customers on the program benefits
- Address the top issues:
 - Installation Issues
 - Privacy/ Cyber Security
 - Accuracy
 - Cost
 - Radio Frequency (RF) Health Effects
- Validate effectiveness of outreach for targeted applications (social media, traditional print, etc.)



Organizational Awareness and Training

- Additional information appropriate for internal staff will be published at various stages of the project
- Typical information pieces include:
 - Presentations
 - Surveys (feedback is compiled and analyzed)
 - E-mail newsletters/ announcements/ status reports
 - Printed flyers/ brochures, etc.
- Topics may include:
 - Project benefits and information sharing
 - Transitional change upon the organization
 - Green initiative concepts
 - RF health studies, privacy, and other areas of concern.



Customer Notifications

- A variety of customer notifications should be developed based on the initial discovery session. Formats may include:
 - Customer notifications (bill notices, mailers)
 - Community events
 - Door hangers
 - Status letters
 - Press releases
 - Brochures
 - Websites
 - Display Site

The image displays a screenshot of a website for the Smart Gas Metering Program and a graphic for Ruston Power Smart.

Smart Gas Metering Program

The City of Long Beach (CLB) Gas Utility is implementing a state of the art metering solution to benefit its customers and improve utility operations.

These new smart gas meters communicate consumption data directly to CLB, making the utility's processes more accurate and efficient. This also eliminates the need for utility representatives to visit homes and businesses to gather information about gas usage for billing purposes.

Benefits

- + Empowering Customers
- + Improving Customer Satisfaction
- + Enhancing Customer Privacy And Safety
- + Reducing Carbon Footprint And Vehicular Traffic
- + Increasing Operational Efficiencies
- + Meter Reading And Billing Accuracy

Smart Gas Metering

- » Smart Gas Meter Program
- » Benefits
- » How it Works
- » What to Expect
- » Frequently Asked Questions

Download CLB's Smart Gas Metering Brochure

Read Frequently Asked Questions (FAQs)

RUSTON Power Smart

The CITY OF RUSTON is building an electric system that is more efficient, resilient, cleaner, reliable and responsive – a Smart Grid.

SMART GRID AND AMI

The City of Ruston is at the forefront of the Smart Grid movement. The electric industry as a whole is making information from a centralized, producer-network to one that is more interactive for consumers. The Smart Grid is characterized by a two-way flow of electricity and information. By incorporating innovative technologies into an improved electric infrastructure, the Smart Grid will advance utility performance and provide better service to customers.

BRIGHT DEVELOPMENTS FOR RUSTON LIGHT & POWER

The City of Ruston successfully completed the design, procurement and implementation of a Smart Metering Pilot Project in 2009. During the course of the pilot, the City applied for the U.S. Department of Energy Smart Grid Investment Grant Program. Ruston was selected late October, 2009 to receive \$4.3 million in funding as one of only one-hundred recipients nationwide. Utility Automation and Engineering T&D Magazine awarded the City of Ruston the Smart Grid Project of the Year in March, 2010 for its innovative design in the grant application.

Goals for the Smart Grid Grant project include:

- Renewable energy generation for targeted city buildings
- A 50% reduction of distribution system interruptions
- Fuel reduction of 7,500 gallons
- A 5% energy reduction overall for customers
- An estimated community cost savings of over \$5,266,674

According to Darrell Caraway, Public Utility Manager, the three-year project also focuses on enhancements to customer account software, automation of the electric distribution system, and testing of energy storage devices including electric vehicles.

Mayor Dan Hollingsworth said that when fully deployed, the new system will make Ruston's power grid more efficient and user-friendly. "These improvements will save Ruston customers on their power and water bills. It will also ensure more accurate meter readings," says the Mayor.

The City retained Utiliworks, a Baton Rouge-based firm that builds smart utility solutions, to assist with the pilot and the grant application. Dale Pennington, Utiliworks' Managing Director, explains that the project fully accommodates all critical components of a smart grid as defined by EPRI - the Electric Power Research Institute. "Incorporating all these components which cut across so many technical disciplines will make this one of the forward thinking smart grid projects in the United States," says Dale Pennington.

Smart Grid extends these benefits to include:

- Enabling active participation by consumers
- Operating resiliently against physical and cyber attack
- Accommodating all generation and storage options
- Optimizing assets and operating efficiently

Smart Grid enables:

- Energy recovery
- Reducing product losses
- Reducing variable structures
- Improving meter and accuracy
- Reducing labor costs
- Reducing customer complaints and errors
- Encouraging customers to reduce consumption

The foundation of the Smart Grid is a term coined "Advanced Metering Infrastructure" or "AMI". An AMI utilizes smart meters which automatically indicate consumption and other system data to the utility. These new meters measure and usage data at a minimum, in hourly intervals, provide usage data to both consumers and companies at least once daily. Most utilities only have one month ready, which is used to measure consumption and billing.

Smart Grid enables:

- Energy recovery
- Reducing product losses
- Reducing variable structures
- Improving meter and accuracy
- Reducing labor costs
- Reducing customer complaints and errors
- Encouraging customers to reduce consumption

The foundation of the Smart Grid is a term coined "Advanced Metering Infrastructure" or "AMI". An AMI utilizes smart meters which automatically indicate consumption and other system data to the utility. These new meters measure and usage data at a minimum, in hourly intervals, provide usage data to both consumers and companies at least once daily. Most utilities only have one month ready, which is used to measure consumption and billing.

Smart Grid extends these benefits to include:

- Enabling active participation by consumers
- Operating resiliently against physical and cyber attack
- Accommodating all generation and storage options
- Optimizing assets and operating efficiently

Smart Grid enables:

- Energy recovery
- Reducing product losses
- Reducing variable structures
- Improving meter and accuracy
- Reducing labor costs
- Reducing customer complaints and errors
- Encouraging customers to reduce consumption

Pilot Prerequisites

- AMI Feasibility Study
 - Very positive business case for AMI, MDMS, Leak Detection and Pressure Monitoring
- Procurement Phase
 - Detailed requirements definition
 - RFP development and administration
 - Vendor evaluation and selection
 - Contract negotiations
- Public relations and education campaign developed

Pilot Project Goals

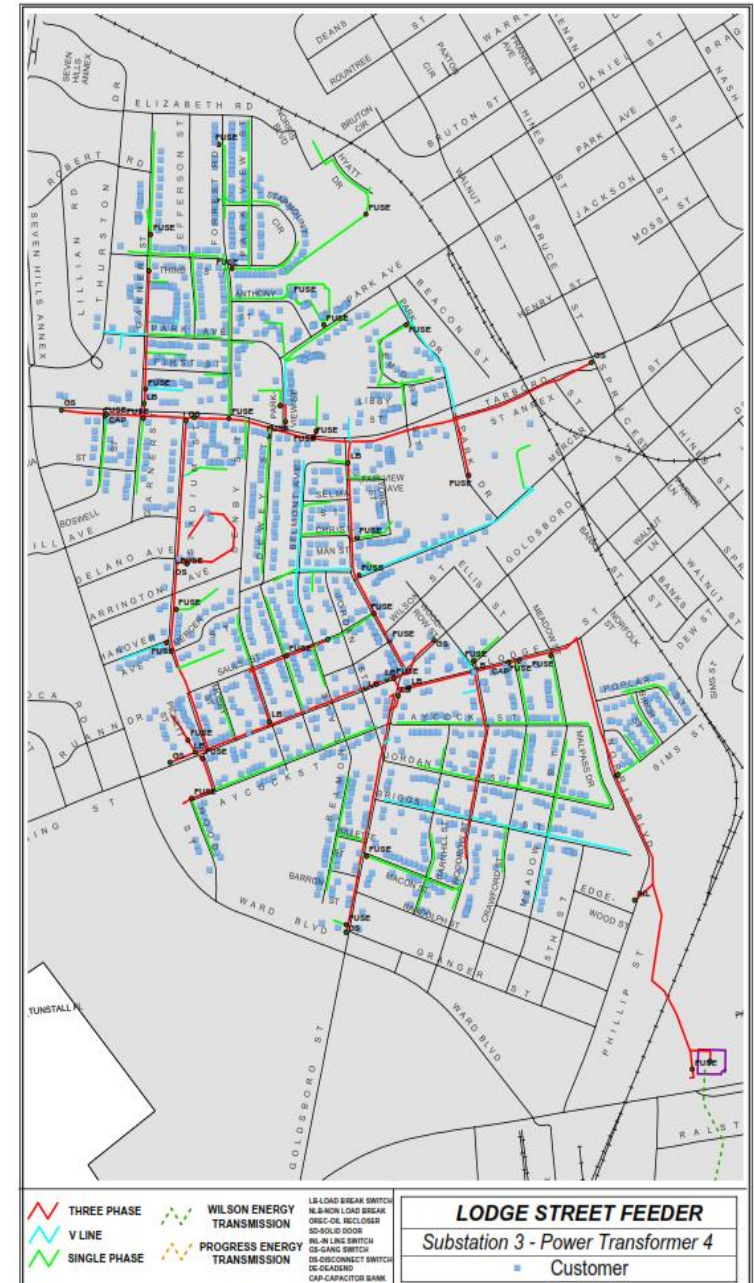
- Proof of concept vehicle
- End to end system test and integration
 - Meets acceptance criteria
- Future state business processes are designed
- All staff members are trained and ready for full deployment
- Customer communication is vetted to better meet customers' needs
- Decision point on whether or not to proceed with full deployment

Pilot Area Considerations

- When selecting a pilot area, we recommend the following considerations in order to capture a representative cross section of Killeen's service area:
 - A defined area such as a specific cycle, route, or neighborhood
 - Physical terrain
 - All customer classes
 - The majority of meter types
 - Backhaul methods
 - High turnover area
 - Special functionality

Example Pilot Area

- # Customers by Class
 - Residential 1,285
 - Commercial 85
 - Industrial 1
- Recommendation for Killeen may be approximately 500-1250 meters for the pilot.



Pilot Project Scope

- The pilot includes a planning phase and a deployment phase
 - Detailed pilot planning and development - 3 months to overlap with certain deployment tasks
 - Pilot deployment is split into two distinct phases - Alpha and Beta
 - Alpha phase - focus is dedicated to the integration of meter data from the AMI headend to the MDMS and back to the CIS
 - Beta phase - field deployment of a pre-determined quantity of metering hardware and backhaul network infrastructure
- *Estimated Pilot Timeline 12-16 Months*

Q&A

Thank You!

For questions and additional information, please contact:

Nicole Griffin, PMP

Associate

UtiliWorks Consulting, LLC

ngriffin@utiliworks.com

631-375-1125