Wellsboro Electric Company

Smart Choices Project

Abstract

The Wellsboro Electric Company (WECo) project involves the installation of advanced metering systems and a pilot program for in-home displays. The project is aimed at reducing overall energy use and operations and maintenance costs while improving distribution system efficiency and reliability. The project implements two-way communication to: (1) allow customers to view their energy consumption at their convenience through in-home displays and energy Web portals, and (2) allow WECo to monitor outages and tamper detections. Serving one of the poorest communities in Pennsylvania, WECo is planning a large energy education campaign using radio spots and informational booths to help customers use the new technologies to reduce their electricity consumption and lower their bills.

At-A-Glance

Recipient: Wellsboro Electric Company

State: Pennsylvania

NERC Region: ReliabilityFirst Corporation

Total Budget: $961,195

Federal Share: $431,625

Project Type: Advanced Metering Infrastructure and Customer Systems

Equipment

- **4,589 Smart Meters**
- **AMI Communication Systems**
  - **Meter Communications Network**
- **Meter Data Management System**
- **Customer Web Portal Access for 100% of Customers**
- **200 In-Home Displays**

Key Targeted Benefits

- **Reduced Electricity Costs for Customers**
- **Reduced Meter Reading Costs**
- **Reduced Operating and Maintenance Costs**
- **Reduced Costs from Theft**
- **Reduced Greenhouse Gas and Criteria Pollutant Emissions**
- **Reduced Truck Fleet Fuel Usage**

Smart Grid Features

Communications infrastructure includes advanced power line communications infrastructure that enables two-way communication between the meters, substations, and control office, and allows for future integration with distribution automation, smart appliances, and home area networks. This infrastructure will also provide WECo with expanded capabilities and functionality to optimize energy delivery, system reliability, and participation.

Advanced metering infrastructure (AMI) includes a rollout of more than 4,500 smart meters to more than 50% of WECo's residential customers and 100% of WECo's commercial and industrial customers. The advanced meters have the potential to lower customer electricity bills by providing the capability for a variety of current and future customer electricity price and service options. Customers can see their energy use, billing information, and carbon footprint through Web portals. The smart meters reduce meter reading and customer services costs, and new AMI features include outage and restoration notification and a remote service switch that enables WECo to improve customer service while decreasing operational expenses. WECo also plans to integrate AMI with its existing supervisory control and data acquisition system, as well as its geographic information system, to expand its monitoring capability.

Advanced electricity service options include the deployment of in-home displays to the first 200 customers to sign up for a demand response test group. The in-home displays allow these customers to view account balance and electricity usage information. The system can also deliver messages from the utility to the customers related to billing and account information. WECo will apply the experience gained in this pilot to design new programs in the future.

Wellsboro Electric Company *(continued)*

Timeline

Key Milestones	Target Dates
AMI/customer system asset deployment begins	Q3 2010
AMI/customer system asset deployment ends	Q4 2011
Data collection ends	Q3 2015

Contact Information

Bob McCarthy
Vice President of Engineering and Operations
Wellsboro Electric Company
bobbym@ctenterprises.org

Recipient Team Project Website: www.wellsboroelectric.com/weco/news&info.asp