Recipient
City of Dubuque

Project Title
Smarter Electricity Iowa

Project Description
The Smarter Electricity Iowa project will provide volunteer households in Iowa communities Dubuque, Algona and Cedar Falls with access to the Smarter Energy Conservation Portal, an interactive online tool developed by IBM which allows customers to monitor energy consumption and save energy. The project is a continuation of a pilot study in which the City of Dubuque installed new smart meters at 1,000 volunteer households and collected electricity usage data for analysis. Study participants were able to track their electricity usage through the portal and, therefore, change electricity consumption behaviors. The portal interface summarizes household consumption, identifies consumer-specific consumption insights, compares historical same-household consumption, compares consumption with similar households in the community, and encourages personalized actions to reduce energy consumption. In addition, users can opt to receive alerts about anomalous usage patterns. Through participation in this project, the City of Dubuque will transfer lessons learned to the cities of Algona and Cedar Falls, where installation of smart meters is ongoing. The project will also enact certain enhancements, making energy consumption data available through a variety of communication tools such as smart phones, utilizing outreach tools such as social media like Facebook, offering attractive incentives, and developing more enriched information and insights. Resulting metrics will then be analyzed to determine the effectiveness of these programs.

Goals/Objectives
The objective of the Smarter Electricity Iowa project is to empower residential consumers to manage their electricity use by enabling access to electricity consumption data through the use of tools and software products. In a trial study, 68% of participants indicated that such software tools and web-based interfaces increased their understanding of personal electricity use. By using these tools, the project hopes to dramatically reduce household energy consumption; shift customer peak demand to periods of lower overall system demand, decreasing the need for peak load production; and create economic (e.g., new jobs and markets), environmental and social benefits in communities that adopt Smart Grid-enabled technologies.

Benefits
- Shift consumer electricity demand to off-peak hours
- Reduce energy consumption from 3-11%
- Reduce costs to the consumer
- Curb carbon emissions through reduced electricity generation

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PARTNERS
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IBM

PROJECT DURATION
9/1/2012 – 11/30/2013

COST
Total Project Value
$1,000,000

DOE/Non-DOE Share
$500,000/$500,000

DEMONSTRATION STATES
Iowa