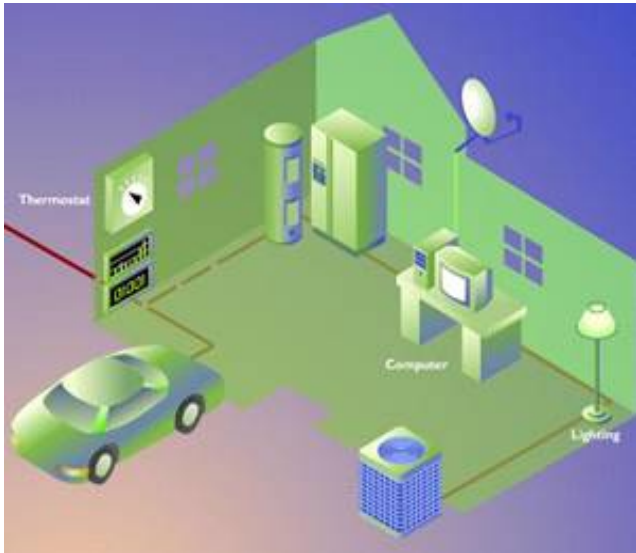


Consumer Portal

Fact Sheet



BACKGROUND Industry economics have resurfaced the need for the functionality of a Consumer Portal that provides a communications gateway between energy providers and consumers for energy service functions. The functions enabled by the consumer portal will facilitate implementation of market functions like real time pricing and demand response, help utilities reduce costs through more efficient operation, help deal with demand and power quality issues on the supply system, improve reliability through outage notification and better coordination with customer systems, secure revenue from additional services, and defer costs to accommodate load growth. Examples of Portal applications include Advanced Meter Reading (AMR), demand response, real time pricing, theft detection, remote disconnect, energy management, Distributed Energy Resources (DER) interface and control, and outage detection. The Portal will be designed to interface with the most common protocols and standards that are in place today serving consumers for non-energy-related services. The wake of failed portal pilot projects that focused on a particular portal application illustrate the need for an open architecture and standardized interfaces that will allow a wide variety of vendors to develop commercial applications for the portal.

Based on an open flexible architecture the portal will facilitate the implementation of new services such as

- demand response and real time pricing
- outage detection
- remote connect/disconnect
- support to distribution operation
- power quality monitoring
- improved customer information.

OBJECTIVES OF THE CONSUMER PORTAL PROJECT

- Create functional specifications for the Consumer Portal
- Create a reference design for support of Demand Response in a Consumer Portal (one of the many functions from the functional specification)
- Collaborate with industry consortia and relevant standards bodies
- Field Demonstration—identify and develop a portal application with a utility partner that demonstrates the open architecture principles and advantages (interfacing to multiple vendor systems) of the consumer portal

APPROACH TO REACH OBJECTIVES

- Work continues to incorporate the needs of our partner utilities and the input from industry stakeholders to assemble the specifications for each Consumer Portal function. In cases where market opportunity is driving the development faster, such as demand response in California, we will work with manufacturers to build from that specific application a more detailed reference design of the Consumer Portal. While the IntelliGrid Architecture represents the “building code,” the reference design represents the “blueprint.”

- History has shown that the best technology and knowledge transfer is through field application at a host company. The Electric Power Research Institute (EPRI) will work with our utility and manufacturer partners to identify and plan a project that showcases a unique feature of IntelliGrid's Consumer Portal. The process will start with coordination between manufacturers and EPRI technical staff to define the profile of an acceptable demonstration. Initial engagements with utilities will be two-pronged: gaining corporate commitment to being an IntelliGrid showcase; and workshops to assist them in defining the project. This is followed by the development of a plan with key personnel from interested participating companies.

PROJECT TECHNICAL ADVISORY GROUP

At this point in the Portal development, participation from all stakeholders is critical. Our utility partners supply the vision for future functionalities, manufacturers, and technology companies provide the direction for compatibility and new technologies, and regulators serve as the gateway to many near-term market opportunities. The Consumer Portal Advisory Group must encourage and embrace all facets to ensure adoption by the industry.

UPCOMING DELIVERABLES

- Assemble broad stakeholders group
- Create functional requirements
- Develop Use Cases for five key applications
- Report on telecommunications technology assessment and develop a process for regular updates
- Create reference design to support Consumer Portal's demand response application
- Identify, define, and begin field demonstrations

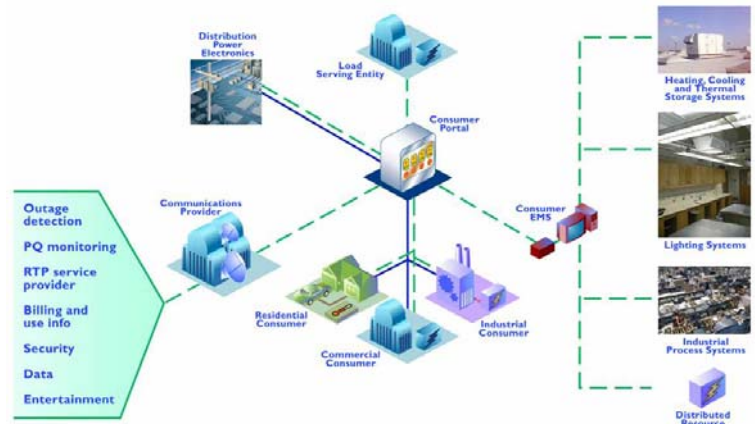
ACCOMPLISHMENTS TO DATE

- IntelliGrid partners priorities description, technical and business overview and survey, Consumer Portal FAQ and Survey, March 2005
- Assessed state-of-the-art trends of communications in utilities systems—Inventory of Utility Communications, March 2004

- Published business case analysis for a consumer communications portal—Business Case Assessment for Energy Service Portals, March 2004
- Published a technology analysis with a recommended approach for developing a consumer communications portal—Energy Service Portal Development—Assessment and Recommendations, December 2003
- IntelliGrid Architecture used by California Energy Commission to create reference design to demand response

CONTACT INFORMATION For more information, contact the EPRI Customer Assistance Center (EPRI CAC) at 800.313.3774 (askepri@epri.com).

TECHNICAL CONTACT For details on the described projects, please go to the www.epri-intelligrid.com Web site or contact Marek Samotyj, IntelliGrid Program Director, at 650.855.2980 (msamotyj@epri.com).



The IntelliGridSM Consortium is a collaboration of utility, manufacturers, researchers, and government leaders, all working together to make the intelligent, self-healing power system of the future a reality.

© 2005 Electric Power Research Institute (EPRI), Inc. All rights reserved. Electric Power Research Institute and EPRI are registered service marks of the Electric Power Research Institute, Inc. IntelliGrid is a service mark of Electric Power Research Institute, Inc.

Printed on recycled paper in the United States of America