

Smart meters mean smarter consumers

By Rep. Rick Boucher (D-VA)

The Hill, June 25 2003- Special Energy Section

Currently, the vast majority of electricity consumers are not provided with a very basic piece of information - a price signal - that would enable them to become smarter energy consumers and to capture the attendant benefits., the vast majority of electricity consumers are not provided with a very basic piece of information - a price signal - that would enable them to become smarter energy consumers and to capture the attendant benefits.

Consumers have little incentive to conserve effectively or to alter their electricity use. For the most part, they have their electricity consumption recorded by antiquated meters, which fail to distinguish between peak and off-peak periods.

The failure to apply new technologies to electricity consumption results in lost opportunities to conserve electricity, to shift more electricity usage to the off-peak periods, to lower electricity bills and to make electricity systems more efficient.

Technological advances have now brought real-time price information within the grasp of our nation's electricity consumers. Through the use of advanced metering technologies, consumers could have advanced meters, which would provide real-time price information, installed at their homes or businesses. Utilities and regional transmission entities would have new data and tools for optimizing the operation and expansion of their systems. By enabling consumers to access accurate data on their usage of electricity and its costs, the use of advanced meters would empower consumers to make informed and accurate decisions regarding their usage.

Moreover, by providing that monthly electricity bills be based on the data recorded by the advanced meter, a consumer's bill would accurately reflect actual electricity usage.

Advanced meters record a consumer's electricity usage at specified intervals during weekdays and weekends and by season.

Using advanced meter technologies, a consumer can monitor his or her electricity consumption and make informed decisions about electricity use. For example, using the advanced meter device, a residential consumer can determine that it would be more economical to run certain appliances, such as a dishwasher or washing machine, during off-peak hours, when the cost of electricity is less expensive. By using the information provided by the meter, the customer would be making wiser decisions regarding his or her consumption and the subsequent choices would result in a lower electricity bill.

Of course, nothing would prevent the customer from using any appliance at any time. Usage would remain a matter of personal choice.

Customers who choose time-based pricing options benefit not only themselves but other customers as well. By reducing peak usage, the overall peak demand in a local electricity market is reduced and competition among wholesale electricity sellers will drive the wholesale price of electricity lower. The partial shift in electricity consumption by consumers to off-peak periods would also reduce the need to build new generation and transmission resulting in further savings.

In addition, the need to construct fewer generation facilities would have an environmental benefit. Despite some advancements in technologies for, and the use of, environmentally sound methods of electricity generation, the environmental concerns associated with the construction of new generation facilities remain substantial. The use of advanced meters to shift a portion of the load to off-peak hours would result in significant savings, which would alleviate the need for this construction.

The benefits to the use of advanced meters are numerous and significant. It is sound public policy to provide consumers with the necessary tools and data to make informed decisions regarding their electricity consumption and to be billed based on their actual usage of electricity. Smart federal energy policy should include support for the use of smart meters.

Boucher is ranking member of the House Energy and Air Quality Subcommittee.