

Abstract #: 228

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Abstract Title: Further Integrating IHDs into the DSM Customer Offering: Outcomes of an IHD pilot for TOU and Dynamic Pricing Customers

Abstract Text:

Home Area Networks (HAN) provide near real-time information on energy consumption directly to the customer's home using the utility's communications-enabled metering infrastructure. Timely information on energy consumption can enable customers to make informed changes to reduce their energy usage and costs. Pacific Gas and Electric Co. (PG&E) implemented a limited rollout of 400 in-home displays (IHDs) in 2012 to test the systems that support the devices and to learn about how residential customers engage with them. An evaluation of the pilot found that 60% of participants reported making changes in electricity usage and taking energy-savings actions. On average, participants used 5.6% less electricity on a daily basis than they are estimated to have used without the devices during the study period. By 2014, PG&E developed scalable system capabilities to allow customers to complete HAN customer service processes on a self-service basis at www.pge.com. The portal supports customer requests to check HAN eligibility and register their HAN device. PG&E also implemented system upgrades to provide energy pricing information for time-of-use (TOU) and dynamic pricing (SmartRate) to HAN devices, in addition to notifications of SmartRate demand response events. PG&E tested two new HAN devices in the summer of 2014 in the homes of 1,700 TOU and SmartRate customers. We will present the findings of an evaluation to determine whether or not the participants found the devices to be effective tools for managing energy consumption and to estimate the effect of the devices on both overall energy consumption and SmartRate demand response impacts.