

Energy Efficiency & Customer Research & Development presents...

Customer Advanced Technologies Program Newsletter

Volume 3, Number 2, May 26, 2005



In this issue...

- From the Editor's Desk
- Spotlight: Smart Vanity Lighting System
- Stay Tuned...

From the Editor's Desk

A local hotel recently experienced the ire of a guest who mistakenly thought that a motion detector used to control the heating and air conditioning system was actually a camera. The irate guest vandalized the thermostat and vehemently complained about the "invasion of privacy." Hotel management and the vendor are currently discussing options to prevent future misunderstandings.

This experience underscores the value of conducting research via demonstration projects in real world applications. Although this particular product has been thoroughly tested under laboratory conditions, who could have predicted this customer's reaction?

Spotlight: Smart Vanity Lighting System

SMUD teamed up with the California Lighting Technology Center (CLTC), the California Energy Commission's PIER Program, SpecLight, The WattStopper Inc. and SMUD customers to develop a 'smart' vanity lighting system for hotels, assisted living facilities and skilled nursing centers. The new fixture includes energy efficient fluorescent lighting, an integrated motion sensor and an LED nightlight with battery back-up that doubles as a safety light during power outages. Based upon preliminary monitoring data, the team expects the new fixture to reduce bathroom lighting energy consumption by as much as fifty percent. However, what makes this system unique is the built-in indirect LED nightlight.



Smart vanity lighting system

The new vanity lighting system includes an LED array that is designed to provide enough light to enable a person to safely navigate a bathroom while preserving dark adaptation and night vision capabilities. The fixture does a remarkable job of providing low-level illumination while operating in the nightlight mode (see photo). Why is this so important? One word: **Safety.**



System in the nightlight mode

When a person who has been sleeping walks into a bathroom and turns on the light, he or she usually experiences difficulty seeing until the eyes are given time to adjust to the brightness. When the bathroom light goes off and the person returns to bed, vision is once again impaired until the eyes adapt to the darkness. Research has shown that this temporary "blindness" may contribute to many falling and tripping accidents that occur at night – especially for senior citizens.

Stay Tuned...

SMUD is field-testing the new lighting system in three different venues: Regency Place, a senior assisted living facility; Emerald Gardens Nursing Center, a skilled nursing center; and the Red Lion Hotel. To learn more about this project, please download the Technology Brief available online at www.smud.org/education/cat/index.html

The Customer Advanced Technologies Program

SMUD's Customer Advanced Technologies (C.A.T.) program works with residential and commercial customers to encourage the use and evaluation of new or underused technologies. The program provides research grants to customers for eligible technologies in exchange for monitoring access rights.