

Energy Efficiency & Customer Research & Development presents...

## Customer Advanced Technologies Program Newsletter

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### From the Editor's Desk

#### "Sometimes the dragon wins."

I once saw a cartoon of a dragon using a knight's lance to pick his teeth. The caption below the picture read "Sometimes the dragon wins." This saying can be all too true for emerging technologies.

Last month I found out that two of the technologies we've featured in the CAT program are no longer commercially available: The Office Torchiere Lighting System (July, 2005) and the Berkeley Table Lamp (October, 2002). This is unfortunate since both technologies showed great energy savings potential and received glowing remarks from customers. Hopefully, other manufacturers will pick up the lance and run with it.

We currently are putting together some interesting projects for 2006:

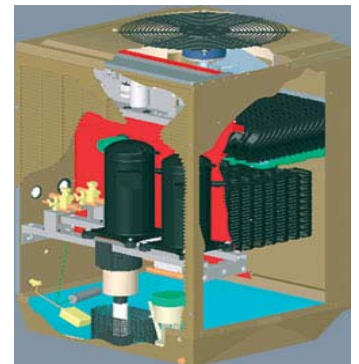
- Coolerado Coolers (five more units)
- SunCache (passive solar water heaters)
- Ice Bear (zero energy homes)
- LED refrigerated case lighting
- Desert CoolAire hybrid air conditioners (a cross between a conventional DX system and a Coolerado Cooler).

Of course, there's no way of telling where any of these technologies will end up, but I'm willing to take another shot at that dragon...stay tuned!

### Technology Spotlight: Freus®

For the past three years, we've been working with Freus Inc., local contractors, and customers to test a residential air conditioning system known as the Freus (pronounced "Free-us"). Freus is a water-cooled (evaporative condensed) air conditioning system that may be nearly twice as energy efficient as conventional air-cooled systems. However, our journey was not all smooth sailing...we encountered some rough seas along the way. Our two newest technology evaluation reports take a candid look at the Freus and include:

- Discussion of basic refrigeration concepts
- Overview of how the Freus works
- Field inspection results
- Energy savings comparison of Freus versus air-cooled systems using DOE 2.1 simulations
- Customer survey results



These reports are available via the CAT Program Web page [www.smud.org/education/cat/index.html](http://www.smud.org/education/cat/index.html)

**The Customer Advanced Technologies Program:** SMUD's CAT program works with customers to encourage the use and evaluation of new or underutilized technologies. The program provides research grants to customers for eligible technologies in exchange for monitoring rights. For more program information, please visit: <http://www.smud.org/education/cat/index.html>

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