

From: Mediaoffice
To: Docket Optical System
CC: Claudia Chandler
Date: 2/13/2008 9:41 AM
Subject: Fwd: PCT Legislation

Please docket this e-mail under dockets 07-BSTD-1 and 08-DR-01. Thanks. Bob Aldrich

>>> "Allen Crosby" <Allen.Crosby@airconenergy.com> 02/13/08 9:17 AM >>>

Hello Claudia Chandler -

I read with interest the idea of a utility demand controlled device for use with residential cooling equipment. I am a professional mechanical engineer in Sacramento and wish to add my two cents worth. But, first I would like to say - I liked your 'opt out or in' opinion expressed in the ICN (Indoor Comfort News) February 2008 article.

The CEC has done a fine job of mandating equipment efficiency and just this step alone has probably saved more power in California alone to operate several other states with just the savings. But, demand savings could be accomplished in other ways than just shutting OFF equipment. I am working on a system in my own home (it will be permitted by the building department) where I have chilled water storage. The chilled water will be produced between 9:00 PM and 8:00 AM and then used between noon and 8:00 PM. The only down side is the size of the storage tank. For my small home of 1750 SF I will need about 21.2-ton hours of storage. This requires about 2,000 gallons of water at 44°F. Where do I hide 2,000 gallons of water? The system will have to have a high wife acceptance factor to be embraced by all.

I am also looking at ice storage because the system would be so much smaller. If I do end up using ice storage, all of the 30+ year old ductwork will need to be replaced because the insulation is too thin for very cold supply air temperatures. The upside is that the compressor waste heat will keep my pool warm for at least four to five months out of the year.

The CEC should provide an incentive for thermal storage on residential with the caveat that no compressors may operate between noon and 8:00 PM. The ECM type motor and a pump can run, but no compression cycle cooling is allowed. The incentive could be in the form of direct payment from the utilities, tax incentives from the state, or other mechanisms to encourage people to sign up on the PCT.

Thank you for listening. Keep up the good work.

D. Allen Crosby, P.E. (M019881)

Aircon Energy Inc.

916-922-2004

