

Energy - Docket Optical System

From: Karl Brown [karl.brown@uc-ciee.org]
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To: Energy - Docket Optical System
Subject: Docket Number 12-BSTD-06

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Re: Comments on 2013 Title 24 Non-Residential ACM Reference Manual Karl Brown, University of California

5.7.2.5 Night Purge

p5-96 (v1-4)

Night purge control strategies (i.e., temporal pre-cooling of thermal mass) should be allowed for Title 24 compliance or reach, in the context of reducing the size of or avoiding installation of refrigeration-cycle cooling systems.

Night purge control strategies (i.e., temporal pre-cooling of thermal mass) utilizing either ventilation or indirect evaporative equipment should be allowed as part of modeled operation of designs that reduce the size of or completely replace refrigeration-cycle cooling systems.

Not allowing night purge control strategies to reduce unmet load hours denies ability to derive maximum value from investment in thermal mass through displacement of refrigeration-cycle cooling capacity. Modeling a virtual refrigeration-cycle cooling system (and its energy intensity) to meet load that can be displaced by pre-cooling unnecessarily discourages adoption of designs that do not rely on energy-intensive refrigeration-cycle cooling. Designs that do not rely on energy-intensive refrigeration-cycle cooling must become common in many building applications in order to meet long-term energy efficiency and climate protection goals.