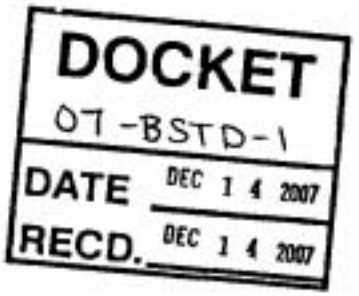
From: Robert Love <bob@sunoptics.com>
To: <Docket@energy.state.ca.us>
Date: 12/14/2007 1:13 PM
Subject: Docket No. 07-BSTD-1



2008 Building Energy Efficiency Standards
Public Hearing December 17, 2007
Attention: Docket No. 07-BSTD-1

RE: Docket No. 07-BSTD-1
From:
Jerome Blomberg, Chairman of Sunoptics Prismatic Skylights

I recognize that there are political pressures put on the Staff and Commissioners whenever changes are proposed to Title 24 Energy Conservation Measures. I have appeared before you at almost every public hearing since 1975 when I was Chairman of Envelope Subcommittee for the Nonresidential Building Efficiency Standards. At that time, we started under the Department of Housing and Urban Development, and finished it under the CEC. For more than thirty-two years, I have been a passionate advocate for day lighted buildings.

As Chairman of Sunoptics Prismatic Skylights, I have witnessed the power of daylighting with skylights in all types of building applications.

As an example, in the last fifteen years, Sunoptics has supplied the skylights to daylight approximately 400,000,000 square feet of retail store space. With a skylight to roof ratio (SRR) of 4% to 5%, the electric lighting can be replaced with daylighting more than 2500 hours per year. With a connected lighting load of 1.2 watts per sq. ft., that amount of daylighted space, takes 480,000 kW off line at most of the electric utilities' peak demand hours; that is half the capacity of a 1000 megawatt nuclear or coal fired plant.

The annual electric savings for those stores is One Billion 200 Million (1,200,000,000) kWh. To generate that amount of electricity annually with Photo Voltaics (PV), it would take an installation of 857,000 kW of PV. Using an installed cost for PV of $8,000 per kW, the cost of the PV to generate the amount of electricity that the daylighting saves would be SIX BILLION EIGHT HUNDRED AND FIFTY SEVEN MILLION ONE HUNDRED FORTY TWO THOUSAND DOLLARS ($6,857,142,000.00).

I am in favor of the voluntary installation of PV as a means of moderating peak demand on the utilities. However, to think that the State of California is going achieve the goals of Assembly Bill 32 to reduce greenhouse gas emissions to the 2000 levels by 2010 with PV, is not rational. I don't care how big the State and Utilities' incentives are for PV, it won't matter.

The point I really want to make is that in section 143 C, the Standard exempts the daylighting requirement if the ceiling or roof height is less than 15 feet. In two earlier public hearings, I proposed that daylighting spaces with ceiling or roof heights of 12 feet can be daylighted for less than half of that allowed by the cost effectiveness barrier in the Standard. By leaving this loophole in the Standard, the Commission infers to the world

that they, with all their energy consultants, have decided that it is not cost effective to daylight spaces when the roof or ceiling heights are less than 15 feet high. This is counter-productive to the goals of the enabling legislation, and must be corrected.

I don't believe the State can wait three more years to correct this misinformation.

Assembly Bill 32 is incredibly ambitious and requires that every State Agency seize every opportunity to reduce energy use in California, especially in all of the State's codes and Standards.

I remain optimistic that the Commission will correct this error in the 2008 Building Energy Efficiency Standards before adoption on January 30, 2008.

I know that daylighting with skylights is a mature, proven concept and that there is adequate capacity in the skylight industry to meet any increased requirement.

Thank you for your reconsideration of this issue.

Just in case I am taking the Governor's and Legislature's concerns about Global Warming and Climate Change too seriously, I am copying this plea to a constituency of interested parties.

Thank you for your consideration.

Jerome Blomberg
Chairman, SUNOPTICS Prismatic Skylights
jblomberg@sunoptics.com

Daylighted Store Area = 400,000,000 Square Feet

Watts per sq. ft.	1.2	480000	kW
Hours off Annually	2500	1200000000	kWh
Annual kWh per kW	1400	857143	kW PV required
Cost of one kW PV	$8000	$8857142857	Cost of PV