

**Docket Optical System - Docket number 10-BSTD-01 and November 7 Workshop - 2013 Building Energy Efficiency Standards**

**DOCKET**

**10-BSTD-01**

DATE Nov.18 2011

RECD. Nov.21 2011

**From:** "Bacchus, Jamy" <jbacchus@nrdc.org>  
**To:** <docket@energy.state.ca.us>, Martha Brook <Mbrook@energy.state.ca.us>  
**Date:** 11/18/2011 6:23 PM  
**Subject:** Docket number 10-BSTD-01 and November 7 Workshop - 2013 Building Energy Efficiency Standards

Martha,

All the residential measures from the CASE studies which the current staff proposals are excluding should be in the reach code. This may be the CEC's intent, but it's not clear from the items presented last week. Also I'm not sure if things are still in flux to know which items are where.

NRDC recommends all the new construction residential measures not adopted as mandatory or in the prescriptive portion of Title 24 Part 6, be placed in Tier I of the reach standards.

Similarly the Performance Standard of Tier I should reflect the readily achievable reduction in energy that is currently shown to be cost effective in TDV by the CASE studies and then some. That is if the CASE studies support a 45% savings over T24 2008 for newly constructed homes, and T24 2013 only incorporates 2/3 of the potential savings to achieve a 30% reduction over 2008 standards, then a Reach Code which only pushes for the 15% reduction of the baseline per A4.2.2.A is still ~5% worse than what could be adopted as mandatory in 2013! This doesn't seem like a stretch code, but in fact weaker than what we should be getting in the Part 6 if all measures were adopted.

To match the 15% potential savings left on the table in the staff proposal we should be targeting a 75% or less energy budget in the Tier I of the Reach. This would be slightly better than the current 45% aggregate savings shown in residential construction.

The Tier II performance level could remain 15% better than the Tier I level or 60% of the energy budget.

Here's the basic change:

## **APPENDIX A4 - RESIDENTIAL VOLUNTARY MEASURES**

### **DIVISION A4.2 ENERGY EFFICIENCY**

**Newly constructed** low-rise residential buildings shall meet Sections 1 and 2:

2. **Performance Standard.** One of the following advanced efficiency levels shall be met:

A. **Tier I:** Buildings complying with the first level of advanced energy efficiency shall have an Energy Budget that is ~~85~~ **75** percent or less than the Title 24, Part 6 Energy Budget for the Proposed Design Building as calculated by Compliance Software certified by the Energy Commission. There shall be a limit on calculated total building electricity consumption placed on the Proposed Design Building within the Compliance Software that is equivalent to 10,000 kWh per year. A Proposed Design Building calculated by the Compliance Software to consume more than this amount of electricity shall use additional energy efficiency measures or an on-site solar electric system to reduce the Proposed Design Building calculated total building electricity consumption to a level that is at or below 10,000 kWh per year; or

B. **Tier II:** Buildings complying with the second level of advanced energy efficiency shall have an Energy Budget that is ~~70~~ **60** percent or less than the Title 24, Part 6 Energy Budget for the Proposed Design Building as calculated

by Compliance Software certified by the Energy Commission. There shall be a limit on calculated total building electricity consumption placed on the Proposed Design Building within the Compliance Software that is equivalent to 8,500 kWh per year. A Proposed Design Building calculated by the Compliance Software to consume more than this amount of electricity shall use additional energy efficiency measures or an on-site solar electric system to reduce the Proposed Design Building calculated total building electricity consumption to a level that is at or below 8,500 kWh per year.

Regarding the preemption issues brought up this Monday at the HCD hearing of CALGreen, the savings potential of installing EnergyStar appliances and equipment should be considered when reevaluating the above Tier I and Tier II reductions in energy budgets. We could assume that 1 or 2 Estar appliances are installed in the Tier I without requiring it and make the percent reduction even further and thereby avoid preemption issues. For the Tier II percent reduction we could assume 3 or 4 Estar appliances and use that to bolster our savings number.

Thank you for the opportunity to comment.

Regards,  
Jamy

Jamy Bacchus, PE  
Staff Engineer, Energy Program  
Natural Resources Defense Council  
111 Sutter Street, 20th Floor  
San Francisco, CA 94104  
Phone: 415-875-6149  
[jbacchus@nrdc.org](mailto:jbacchus@nrdc.org)