

DOCKET

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**BEFORE THE CALIFORNIA ENERGY COMMISSION
OF THE STATE OF CALIFORNIA**

Attention: Docket No. 12-BSTD-1

Adoption of 15-Day Language for the 2013 Building Energy Efficiency Standards

Dockets Office
1516 Ninth Street, MS-4
Sacramento, CA 95814

**COMMENTS OF THE
CALIFORNIA BUILDING INDUSTRY ASSOCIATION
REGARDING THE
PROPOSED 2013 BUILDING ENERGY EFFICIENCY STANDARDS**

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The California Building Industry Association (CBIA) is a statewide trade association representing over 3,000 member-companies involved in residential and light-commercial construction. CBIA-member companies produce over 90% of the new residential dwellings constructed in California on an annual basis.

In light of recent changes made to the proposed standards, please be advised that **the California Building Industry Association has removed its opposition to the Proposed 2013 Residential Building Energy Efficiency Standards and will now support adoption of these regulations.**

While CBIA still has concern over the level of stringency and the related compliance cost, we also recognize the Energy Commission's strong desire to meet the state's aggressive energy policy goals over the next eight years.

In response to serious objection raised by industry regarding design and cost-impact issues related to the 45-Day Language, the CEC has removed roof-deck insulation and third-party insulation inspections from the "Package A" budget-calculation features. In addition, the CEC has shifted the proposed wall design in Package A from "2x6" construction back to standard "2x4" construction. While all three of these items will remain available to industry for use as compliance options, this set of changes to the Package A features has the effect of reducing compliance cost in the Central Valley region by approximately \$2,800.

Even with these modifications, the remaining changes to the Standards will still result in the single greatest increase in stringency and cost of any update to the Standards in the CEC's 35-year history. And while it would have been our preference for the CEC to have forgone any changes during this 3-year cycle, CBIA recognizes that the Administration's need to balance the goal for increasing energy efficiency with the extremely difficult economic conditions confronting California's housing industry at the present time.

In that spirit of cooperation, CBIA will support adoption of the "15-Day Language" as it relates to the residential provisions contained in Part 6 and the associated administrative regulations in Part 1 (collectively known as the California Energy Code).

CBIA would also like to extend a special note of thanks to the CEC Staff, and especially to Mazi Shirakh, Martha Brooks and Patrick Saxton for their efforts to address CBIA's individual technical concerns and for working with CBIA in the effort to identify the overall compliance costs associated with the proposed Standards.

Balancing Energy Efficiency with the Downturn in the Economy

The State has the policy goal of having new homes zero net energy by 2020 and new commercial buildings by 2030. Achieving this aggressive will require a mix of energy efficiency building standards, distributed generation and plug-load reduction measures. This is not going to be cheap, and all of this needs to be done while the economy slowly emerges from the worst downturn in the housing sector seen in over sixty years.

General State of the Industry: California's homebuilding industry is currently in the middle of the worst economic climate since industry began keeping statistics in 1955. Economists predict for the next three to five years there will be an excessive inventory of homes from foreclosures which produces downward pressure on new home pricing from lower appraisal values and excessive supply.

Significant Job Loss: According to data collected by California's Department of Housing and Community Development, there were 179,000 construction-related jobs at the end of 2010, down from a high of 960,000 in 2006. This means we have lost approximately 80% of our total workforce over the past 6 years. The construction industry accounts for 1/3 of the State's overall unemployment figure. The Governor and the Legislative Analyst's Office predict California's employment level returning to "normal" in the third quarter of 2016.

Financing Challenges: Both homebuilders and homebuyers are finding it increasingly difficult to obtain financing from lending institutions. Tightening of credit requirements and excessively large down payments (20% and up) have knocked most homebuyers, including those with excellent credit ratings, out of the home-buying market. Making matters worse, over 50% of California homeowners owe more on their mortgage than their house is currently worth.

Major Cost-Cutting Efforts Underway: All of this has prompted many homebuilders to substantially change the design of the product they are marketing by implementing significant cost-cutting measures aimed at reducing standard material and labor costs to a bare minimum. For example, builders are making substantial reductions in overall square footage of their product. We are seeing large production-style builders marketing their new product in the low-to mid- \$200,000 range in an attempt to stay competitive with distressed housing in the general neighborhood.

Marketing Challenges: Given the 45%-50% increase in the stringency in California's energy standards over the past ten years, it is becoming extremely difficult to differentiate the "improved energy efficiency" value of a new set of energy standards from the standards they replace. Case in point: A home built to the 2010 Building Energy Efficiency Standards is a very energy efficient home. Given that California homes must already be built to the most stringent statewide energy standards in the country, how can industry effectively market the **value** of even tighter (and more costly) energy standards to a typical homebuyer who places price and location above all other considerations.

Recent Changes to California's Building Codes: In the past 24 months, the State of California has implemented new mandatory building standards resulting in the single greatest increase in code-related construction costs in the past 35 years. Among other things, this includes \$2,170 for the energy standards that took effect in 2010, the \$1,000 cost of the new mandatory green building code and the \$3,000-\$6,000 cost for the residential fire sprinkler mandate for that took effect in 2011. In hard cost, the State of California has implemented mandatory building standards that have added an estimated **\$6,500 - \$10,000** to the cost of building a new home.

Looking Forward

Alternative Compliance Measures: CEC Staff has made reference to several Alternative Compliance Measures that will be considered during the upcoming ACM proceeding. In particular, staff has made reference to the potential provision of compliance credit for the installation of rooftop photovoltaic (PV) energy systems and another that includes some manner of compliance credit for lighting or “plug load” reduction measures. Industry is very supportive of these efforts and believes that the compliance credit should be proportional to the energy generated from the PV system.

Short-term Priorities (next 1-2 years)

Education and Training: The substantial job-loss that has occurred in the construction industry as well as local code-enforcement sectors presents a formidable challenge in the coming years. There is a high likelihood that builders, contractors, plan-checkers and building officials will need substantial training on both the 2008 and 2013 Building Energy Efficiency Standards.

Given the growing complexity of the standards, there is certainly the need for the CEC, utilities and others to provide **ongoing** education and training at the local level...for at least the next decade.

Availability of Certified Compliance Software:

CBIA supports having certified compliance software readily available at least 9-12 months prior to the effective date of the standards. This is especially helpful for those production builders starting a project prior to January 2014 and who want to design the entire project to the new Standards. As noted in the last Standards update, if software is not available, CBIA recommends delaying the effective date until 9-12 months after the software is certified and readily available to the public.

Simplification of compliance documentation:

CBIA strongly supports the position of the California Building Officials (CALBO). There has been and remains a great need to simplify compliance documentation required by the CEC.

Long-term Priorities (next 4 years)

Plug-load and its impact on “zero-net energy”:

Approximately half of the electricity consumed in homes is not covered by the Building Energy Efficiency Standards. Much of this energy is plug load. CBIA would like to work with the CEC and other agencies in finding ways to effectively reduce overall plug load in a home.

Lacking such action, the cost of achieving “zero net energy” will remain prohibitively high. Numerous studies by very diverse groups estimate the cost of ZNE compliance to range from a low of \$40,000 to a high of \$80,000. CBIA estimates the cost of ZNE compliance in a 2,400 square foot home to be \$58,000 with 2/3's of that cost attributed to the large PV solar unit needed to provide the annual energy needs of the dwelling. Simply put: reduce the plug load and the cost of ZNE will come down.

Maintaining a Reasonable Number of Available Compliance Options:

As the CEC developed the 2013 regulations, a substantial number of existing compliance options were moved into the “prescriptive packages” which are used to generate the required “energy budget” for the home.

If the CEC does not add a similar number of “compliance options” to replace those that have been removed, designers and builders are going to have a much harder time finding a set of features that are both marketable and meet the CEC minimum requirements for compliance.

As the CEC goes about developing the next two updates to the code, industry urges the commission to maintain a reasonable level of compliance options. This not only helps with design flexibility, it also helps make transition to the next set of Standards easier given the growing familiarity with the various items over the 3-year code cycle.

Home Appraisals:

It is becoming increasingly frustrating to hear from the appraisal community that they will attribute little, if any value for increasing levels of energy efficiency and distributed generation (solar). This has to change....and quickly. CBIA would like to work with the Commission, the Administration and our counterparts at the federal level to try and correct this problem as soon as possible.

New homes vs existing homes:

For the past several years and for the foreseeable future, industry is adding only **1/3 of 1%** to the total housing stock each year. However, of the 13,433,728 existing homes and apartments in California, 9,153,400 (68%) were constructed under building standards containing no required provisions for energy efficiency.

Simply put, 2 out of 3 homes in California have never had to comply with any energy efficiency mandate whatsoever. Yet the regulatory focus exerted by the CEC over the past 12 years has focused almost entirely on the new housing stock.

In 2008, a study funded by the California Homebuilding Foundation (CHF) found that retrofitting existing homes with energy-efficient features was four to eight times more carbon- and cost-efficient than adding further energy-efficiency requirements to new housing.

If California is to reach its greenhouse gas reduction goals, the CEC, along with the PUC and ARB will need to significantly reevaluate regulatory priorities and focus more on the existing building stock.