

STATE OF CALIFORNIA
CALIFORNIA ENERGY COMMISSION

DOCKET	
07-BSTD-1	
DATE	APR 23 2008
RECD.	APR 24 2008

In the Matter of:

2008 Amendments to the Energy
Efficiency Standards for Buildings

Docket No. 07-BSTD-1
Order No. 08-423-11
ADOPTION ORDER

I. INTRODUCTION

The California Energy Commission hereby adopts amendments to its energy efficiency standards for buildings. These amendments are pursuant to the requirements in Public Resources Code Sections 25402 and 25402.1 regarding the Energy Commission's responsibilities to "periodically update" the standards. They are proposed for a July, 2009 effective date.

The 2008 Building Energy Efficiency Standards are intended to respond to several statutory directions and statewide energy policy initiatives. The Warren-Alquist Act, Division 15 of the Public Resources Code, requires the Energy Commission to set by regulation, building design and construction standards that increase efficiency in new buildings, and to update these regulations periodically. Public Resources Code Sections 25402 (a) and 25402 (b) were enacted as part of the enabling legislation establishing the Energy Commission and its basic mandates. These sections require the Energy Commission to adopt, implement, and periodically update energy efficiency standards for both residential and nonresidential buildings. Enacted at that same time, Section 25910 directed the Energy Commission to adopt standards for the minimum amount of additional insulation installed [as an alteration] in existing buildings.

The following additional legislation and policy initiatives of this Administration have provided further direction to Energy Commission efforts on the 2008 Standards to address building design and construction measures that will provide substantial energy savings and achieve statewide environmental goals:

- Senate Bill (SB) 639 (Statutes of 1993) added Section 25402.5 which expressly directed the Energy Commission to consider both new and replacement [as an alteration to an existing building], and both interior and exterior, lighting devices as lighting which is subject to Section 25402. SB 639 also made the express finding that the mandate to consider exterior lighting and replacement lighting is declarative of existing law, clarifying that the Energy Commission's authority related to exterior lighting and to alterations to existing buildings was included in the Legislature's original intent in enacting Section 25402.

- SB 5X (Statutes of 2001) added subsection (c) to Section 25402.5 to clarify and expand the Energy Commission's authority to adopt standards for outdoor lighting (defined as all electrical lighting not subject to the Energy Commission's current standards).
- Governor Schwarzenegger issued Executive Order S-20-04, the Green Building Initiative, which lays out a comprehensive set of actions for California to improve the energy efficiency of nonresidential buildings. The Energy Commission is directed to undertake all actions within its authority to increase the efficiency requirements in the Building Energy Efficiency Standards for nonresidential buildings by 20 percent by 2015.
- Governor Schwarzenegger joined the governors of Washington and Oregon in November, 2004 to approve the West Coast Governors' Global Warming Initiative. The Initiative commits to a series of tri-state collaborative actions including adding aggressive energy efficiency measures into updates of state building codes, with a goal of achieving at least 15 percent additional savings by 2015 in each state.
- Governor Schwarzenegger issued Executive Order S-3-05, the Climate Action Initiative, which establishes California as a world leader by setting greenhouse gas emissions reduction goals. The order established goals to reduce California's greenhouse gas emissions to 2000 levels by 2010, 1990 levels by 2020, and to reduce 1990 levels by 80 percent by 2050. Assembly Bill 32 (Statutes of 2006), the Global Warming Solutions Act of 2006, mandated that California must reduce its greenhouse gas emissions to 1990 levels by 2020. Increasing the stringency of the 2008 Building Energy Efficiency Standards has been identified as an early action to respond to these climate change directives.
- Senate Bill 1 (Statutes of 2006) enacted Governor Schwarzenegger's Million Solar Roofs Initiative. The statute added sections to the Public Resource Code that require building projects applying for ratepayer-funded incentives for photovoltaic (PV) systems to meet minimum energy efficiency levels and that PV system components and installations meet rating standards and specific performance requirements. As part of SB1 implementation, the Energy Commission established the New Solar Homes Partnership (NSHP) for solar electric system incentives for newly constructed residential buildings. Under NSHP, newly constructed residential buildings must achieve energy efficiency levels substantially greater than the requirements of the Standards. The 2008 Building Energy Efficiency Standards added NSHP as a compliance option to establish a mechanism for promoting highly energy efficient solar homes in the standards. The Energy Commission was also directed by SB1 to adopt eligibility criteria for all projects seeking incentives for installing solar electric systems. The Energy Commission adopted eligibility criteria for newly constructed nonresidential buildings to achieve high levels of energy efficiency plus high performing photovoltaic systems to qualify for incentives.

- California's Energy Action Plan is developed jointly by the California Public Utilities Commission and the California Energy Commission with active participation from other state agencies with energy-related responsibilities. The Energy Action Plan establishes energy efficiency as the resource of first choice for meeting California's energy needs, and directs the Energy Commission to adopt new building standards for implementation in 2008 that include new energy efficiency measures, cost effective demand response technologies, and encourage integrated photovoltaic systems. Adoption of aggressive energy efficiency goals, including a goal to achieve zero energy use new buildings, adoption of continually more stringent updates to standards, and combined efforts to integrate high levels of energy efficiency and solar energy systems are directed in the 2008 Energy Action Plan.
- The Integrated Energy Policy Report (IEPR) is the Energy Commission's statewide energy policy report to the Legislature that assesses California's major energy trends and issues and makes policy recommendations to conserve resources, protect the environment, ensure reliable, secure and diverse energy supplies, enhance the state's economy, and protect public health and safety. The 2005 IEPR placed top priority on energy efficiency to combat both electricity and natural gas problems. The IEPR finds that Standards are the most cost effective means to achieve energy efficiency, expects the Building Energy Efficiency Standards to continue to be upgraded over time to reduce electricity and peak demand, and recognizes the role of the Standards in reducing energy related to meeting California's water needs and in reducing greenhouse gas emissions. The 2007 IEPR recommends adoption of statewide energy efficiency targets for 2016 equal to 100 percent of economic potential, to be achieved by a combination of state and local standards, utility programs, and other strategies. The 2007 IEPR also recommends the increase of efficiency standards for buildings so that, when combined with on-site generation, newly constructed buildings can be net zero energy by 2020 for residences and by 2030 for commercial buildings. For the building standards to reach the aggressive goals described in the various policy reports, initiatives, and legislation, the Energy Commission will have to continue to consider vigorous efficiency coupled with technologies like solar photovoltaic systems, building on the progress made by the Energy Commission through the NSHP, the SB1 eligibility criteria, and the 2008 Standards.

The development of these Standards has been completed through an extensive cooperative effort with the Public Goods Charge funded Statewide Codes and Standards Program of the California utilities, consistent with Public Resources Code Section 25402.7 (AB 549, Statutes of 2001). The Energy Commission will pursue implementation of the Standards cooperatively with the California utilities consistent with this statute.

II. FINDINGS

Based on the entire rulemaking record (Docket No. 07-BSTD-1) of this proceeding, we find as follows:

- A. The Warren-Alquist Act. The adopted standards:
- (1) prescribe minimum efficiency levels for building and outdoor lighting;
 - (2) require efficiencies that are necessary to save energy; and
 - (3) are cost-effective when taken in their entirety and when amortized over the economic life of the structure compare with historic practice.
- B. The Administrative Procedure Act. The adopted regulations:
- (1) will impose no direct cost or direct or indirect requirements on state agencies, local agencies, or school districts, including but not limited to costs that are required to be reimbursed under Part & (commencing with section 17500) of the Government Code;
 - (2) will result in no cost or savings in federal funding to the state;
 - (3) will have no significant impact on housing costs;
 - (4) will not result in a significant statewide adverse impact directly affecting business, including the ability of California business to compete with businesses in other states;
 - (5) will not create or eliminate a significant number of jobs in California;
 - (6) will not create new business, eliminate existing businesses, or have an effect on the expansion of businesses in California;
 - (7) will not impose cost on private persons;
 - (8) will have no significant adverse effect on business in general or small business in particular;
 - (9) will have no significant costs that a representative person or business would incur in compliance; and
 - (10) have no alternatives that would be more effective in carrying out the purpose of the Warren-Alquist Act without increasing burdens, or that would be as effective and less burdensome in carrying out the purposes.

- C. Alternative Calculation Method (ACM), Approval Manuals (for residential and nonresidential compliance, respectively), and Reference Appendices.

The Energy Commission has made significant changes in its standards and to be consistent with the new Standards it has amended for adoption the ACM, Approval Manuals, and Reference Appendices. These are supporting documents to the Standards and include administrative regulations that provide the criteria for Energy Commission approval of “alternative calculation methods” that, when approved, can be used to establish a building design’s compliance with the building energy efficiency standards, and detailed procedures, protocols, eligibility criteria and technical data needed for certain measures to qualify for Standards compliance credit.

- D. The California Environmental Quality Act.

The Energy Commission has prepared and circulated for comment an Initial Study and Proposed Negative Declaration for the proposed amendments. The Initial Study meets all requirements of the California Environmental Quality Act, and concludes that there will be no significant adverse impacts resulting from adoption of the proposed amendments.

III. ADOPTION OF NEGATIVE DECLARATION

The Energy Commission, having considered the Proposed Negative Declaration, including the Initial Study and public comment, adopts the Proposed Negative Declaration.

IV. ADOPTION OF PROPOSED AMENDMENTS

The Energy Commission adopts the proposed Standards amendments, including those changes indicated in the errata that show additional changes to the 15-day language. The amendments shall become effective upon approval and publication by the California Building Standards Commission.

V. ADOPTION OF AMENDMENTS TO ACM MANUALS AND REFERENCE APPENDICES

The Energy Commission adopts the proposed amendments to the Alternative Calculation Method Approval Manuals and the Reference Appendices, as defined by Section 10-102 of the energy efficiency standards and as incorporated by reference into the standards by Section 10-109 and by other specific references in the Standards.

VI. CONTINUATION OF DELEGATION OF AUTHORITY TO THE EFFIEICNCY COMMITTEE; DIRECTIVES TO THE COMMITTEE

The Energy Commission continues in effect its delegation to the Efficiency Committee of the authority to take, on behalf of the Commission, all actions reasonably necessary to have the adopted regulations go into effect, including but not limited to incorporating any changes approved at the April 23, 2008 hearing into the final Express Terms submitted to the California Building Standards Commission (CBSC); making any appropriate nonsubstantive, editorial-type changes; and preparing and filing all appropriate documents, such as the Final Statement of Reasons and nine-point criteria to the CBSC.

Dated: April 23, 2008

STATE ENERGY RESOURCES
CONSERVATION AND
DEVELOPMENT COMMISSION



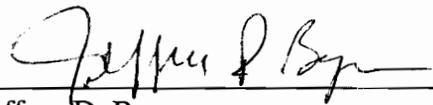
Jackalyne Pfannenstiel
Chairman

(Absent)

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Vice-Chairman



Arthur H. Rosenfeld
Commissioner



Jeffrey D. Byron
Commissioner



Karen Douglas
Commissioner