CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

DOCK
05-BSTD-1
DATE JUN 20 2005
RECD. JUN 20 2005

NOTICE OF PROPOSED ACTION

REVISIONS TO THE CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 6, SECTION 118(i)3 (CALIFORNIA ENERGY CODE) DOCKET # 05-BSTD-1

COOL ROOF COATINGS PERFORMANCE REQUIREMENTS

The California Energy Commission proposes to adopt changes to the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6, Section 118(i)3. The Energy Commission is proposing amendments regarding the physical performance requirements of liquid-applied cool roof coatings.

PUBLIC COMMENT PERIOD/AVAILABILITY OF DOCUMENTS/CONTACT PERSONS

The Commission has prepared an Initial Statement of Reasons regarding the need for the proposed amendments. The Commission has also published the Express Terms of the proposed amendment language. These documents can be obtained from the contact persons designated below or from the Commission website, www.energy.ca.gov/title24/roofcoatings/. The Commission's Energy Efficiency Committee will hold a public hearing on the following date to receive public comment on the Express Terms in response to a petition for rulemaking submitted by a consortium of liquid-applied roof coating manufacturers led by National Coatings Corporation. The Committee hearing will be held as follows:

TUESDAY, JUNE 7, 2005
10:00 a.m.
California Energy Commission
Hearing Room A
1516 Ninth Street
Sacramento, California
(Wheelchair Accessible)

Audio from this meeting will be broadcast over the Internet.
For details, please go to www.energy.ca.gov/webcast.

At this hearing any person may present statements or arguments relevant to the proposed action. Interested persons may also submit written comments; if possible, please provide written comments to be considered at the Committee hearing by June 3, 2005. The Commission appreciates receiving written comments at the earliest possible date. The Energy Efficiency Committee may hold another hearing after June 7, 2005, if necessary.

The hearing before the full Commission for adoption of the Express Terms will be held on the following date unless the Commission decides to modify the Express Terms through 15-day language. Written comments on the Express Terms will be accepted by the Energy Commission until the end of the adoption hearing on June 22, 2005.

PROPOSED ADOPTION DATE – FULL COMMISSION HEARING

WEDNESDAY, JUNE 22, 2005
10:00 a.m.
California Energy Commission
Hearing Room A
1516 Ninth Street
Sacramento, California
(Wheelchair Accessible)

Audio from this meeting will be broadcast over the Internet.
For details, please go to www.energy.ca.gov/webcast.

The Energy Commission may adopt the proposed changes in the Express Terms at the above hearing or may decide to modify the Express Terms in a manner that is sufficiently related to the original notice of proposed action. The Commission may modify the Express Terms in any way it determines appropriate, including but not limited to those alternatives identified in the "Consideration of Alternatives" section below. If the Energy Commission decides to modify the Express Terms, the full text of the proposed modifications (15-day language) will be available to the public for at least 15 days prior to the date on which the Energy Commission adopts these modifications, and this adoption date will be a publicly noticed hearing date. Interested persons may then comment on the modifications during the 15-day period, or until such amendments are adopted.

Please address both procedural and technical questions to the following **designated contact persons**:

Elaine Hebert
RE: Docket Number 05-BSTD-1
California Energy Commission
1516 Ninth Street, MS-25
Sacramento, CA 95814
Telephone No.: (916) 654-4800
Facsimile No.: (916) 654-4304
Email address: ehebert@energy.state.ca.us

If Ms. Hebert is unavailable, contact

Tony Rygg
Telephone No.: (916) 653-7271
Email address: trygg@energy.state.ca.us

When comments are emailed, the comments should be a scanned copy on your organization's letterhead and include your signature.

This notice, the Express Terms, the Initial Statement of Reasons, and all of the information upon which the proposed changes are based will be posted to the rulemaking website, www.energy.ca.gov/title24/roofcoatings/, and contained in the rulemaking file maintained by the Commission's Dockets Office.

The Energy Commission's Public Adviser, Margret J. Kim, provides public assistance in participating in Energy Commission activities. If you would like information on how to participate in this proceeding, please contact the Public Adviser's Office by phone at (916) 654-4489 or toll free at (800) 822-6228, by FAX at (916) 654-4493, or by e-mail at pao@energy.state.ca.us. If you have a disability and require assistance to participate in the workshop(s), please contact Lou Quiroz at (916) 654-5146 at least five days in advance.

News media inquiries should be directed to Claudia Chandler, Assistant Executive Director, at (916) 654-4989.

AUTHORITY AND REFERENCE

The Energy Commission proposes to adopt these amendments to the building standards under the authority granted by Public Resources Code Sections 25213 and 25402 (a) and (b), and to make specific the requirements of Sections 25402 (a) and (b).

INFORMATIVE DIGEST

Summary of Existing Laws

Public Resources Code Sections 25402 (a) and (b) were enacted in 1975 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. Public Resources Code Section 25213 directs the Energy Commission to adopt rules and regulations, as necessary, to carry out its statutory duties.

Summary of Existing Regulations

The Building Energy Efficiency Standards were first adopted in 1976 and have been updated periodically since then as directed by statute (the Standards have been updated roughly every three years, more frequently than that in the early years).

The Building Energy Efficiency Standards allow builders to claim performance credit for "cool roofs," that is, roofs that have solar reflectance and thermal emittance properties that reduce the need for air conditioning to cool the building. To receive performance credit under the Standards, liquid-applied roof coatings must meet specific physical performance requirements, listed in Section 118(i)3, Table 118-C, to qualify as cool roof products. These requirements include minimum elongation (stretching until breakage) requirements at low temperature (0°F). The elongation must be measured in conformance with American Society

of Testing and Materials (ASTM) D2370-98 (2002), *Standard Test Method for Tensile Properties of Organic Coatings*.

Summary of Effect
The proposed action would add an alternate test approach to these requirements to allow minimum low-temperature flexibility instead of low-temperature elongation. The flexibility would be measured in conformance with ASTM D522-93a (2001), *Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings.*

The proposed action results from a petition for rulemaking filed with the Commission on April 4, 2005, to change the adopted physical performance requirements in the 2005 Standards, Section 118(i)3 and Table 118-C, for qualifying as cool roofs liquid-applied roof coatings on low-sloped nonresidential buildings. The petitioners, a consortium of 24 manufacturers led by National Coatings Corporation, claim that the adopted test approach for low temperature performance unnecessarily restricts the qualified cool roof coating products only to those that meet minimum elongation characteristics requirements at 0°F, and that other coating products that cannot meet the minimum elongation requirements are durable and perform fully satisfactorily in California climate conditions, including in California climates with very cold winters. The petitioners propose that the Commission consider adding a test approach that tests for minimum flexibility rather than minimum elongation at low temperatures. This would allow many more coating products to be used in the state as cool roof products that, the petitioners claim, still perform well in California climates. Previously, on March 17, 2005, Energy Commission staff received a letter from the Roof Coating Manufacturers Association (RCMA) regarding the same section, Section 118(i)3, Table 118-C. RCMA suggested that the Energy Commission eliminate the physical performance requirements for liquid-applied cool roof coatings in Section 118(i)3.

On April 13, 2005, the Energy Commission accepted the National Coatings Corporation consortium's petition to initiate a rulemaking proceeding on the changes proposed above. During this proceeding the Energy Commission will also consider the comments from RCMA.

Comparable Federal Statute or Regulations
There are no comparable federal statutes or regulations.

Document Incorporated by Reference
American Society of Testing and Materials (ASTM) D522-93a (2001), *Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings*, would be incorporated by reference. Copies are available from the contact persons designated above.

Policy Statement Overview
The statutorily mandated purpose of the Commission's Building Energy Efficiency Standards is to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy. The intent of Section 118(i)3 and Table 118-C is that liquid-applied coatings meet physical performance requirements that insure that the coatings will be durable under a range of California conditions and thereby will reliably achieve the energy savings expected by the Standards. The petitioners assert that this can be accomplished by adding the proposed

flexibility test as an alternate to the current elongation test. If adopted by the Energy Commission, the proposed changes would result in less restrictive regulations while reliably accomplishing the energy savings expected by the Standards.

MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS

The Energy Commission has determined that the proposed regulatory action would not impose a mandate on local agencies or school districts.

ESTIMATE OF COST OR SAVINGS

A. Cost or Savings to any state agency: No
B. Cost to any local agency required to be reimbursed under Part 7 (commencing with Section 17500) of Division 4: No
C. Cost to any school district required to be reimbursed under Part 7 (commencing with Section 17500) of Division 4: No
D. Other nondiscretionary cost or savings imposed on local agencies: No
E. Cost or savings in federal funding to the state: No

INITIAL DETERMINATION OF NO SIGNIFICANT STATEWIDE ADVERSE ECONOMIC IMPACT ON BUSINESSES, INCLUDING SMALL BUSINESSES

The Energy Commission has made an initial determination that the proposed amendment will not have a significant statewide adverse economic impact on businesses including small businesses, including the ability of California businesses to compete with business in other states. Such a determination is dictated by common sense, as the proposed amendment would merely allow a greater variety of existing products to be used to satisfy the requirement for roof coating applications.

The proposed changes to the regulations do not change the energy efficiency requirements of public or private building owners. By adding an alternate testing approach, the changes merely add flexibility to the requirements that must be met by roof coating manufacturers to insure durability of those products to achieve the expected energy savings of the Standards. This results in less restrictive regulations while still accomplishing the energy savings expected by the Standards. This additional flexibility could not possibly cause a statewide adverse impact on businesses.

COST IMPACTS ON REPRESENTATIVE PERSON OR BUSINESS

Representative persons and businesses will incur no costs in compliance with the proposed amendments, because the amendments would increase options for compliance, thereby potentially enabling compliance at lower cost.

FINDING OF NECESSITY FOR THE PUBLIC'S HEALTH, SAFETY, OR WELFARE

The Energy Commission makes an initial determination that the proposed changes are necessary for the public's health, safety, or welfare.

ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION

The Energy Commission has assessed whether or not and to what extent this proposal will affect the following:

- The creation or elimination of jobs within the State of California.
  The proposed changes will not result in creation or elimination of jobs within California.

- The creation of new businesses or the elimination of existing businesses within the State of California.
  The proposed changes will not result in the creation or elimination of businesses in California.

- The expansion of businesses currently doing business with the State of California.
  The proposed changes will not impact whether or not current businesses in California expand.

INITIAL DETERMINATION OF SIGNIFICANT EFFECT ON HOUSING COSTS

The Energy Commission has made an initial determination that this proposal would not have a significant effect on housing costs.

CONSIDERATION OF ALTERNATIVES

The Commission has considered two possible alternatives to the proposed changes: 1) eliminate the physical performance requirements for liquid-applied coatings in their entirety, and 2) make no changes to the current Standards. The Commission believes it is critically important to have physical performance requirements for coatings to insure that the coatings are durable and reliably achieve the energy savings expected for cool roofs. Based on information received to date, the Commission believes that the recommendations for adding an alternate testing approach in the proposed changes are reasonable. If the Commission adopts the proposed amendments, it must determine that it has not identified a more reasonable alternative that would more effectively satisfy the purpose of the amendments and be less burdensome to affected private persons.

FINAL STATEMENT OF REASONS

Once amendments are adopted, the Commission will prepare a Final Statement of Reasons responding to all substantive public comments pertinent to the proposed regulation. A copy of the Final Statement of Reasons can be obtained from either of the designated contact persons identified above or on the Commission's website at www.energy.ca.gov/title24/roofcoatings/.