

COMMITTEE HEARING  
BEFORE THE  
CALIFORNIA ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION

In the Matter of: )  
 ) Docket No.  
CALIFORNIA CODE OF REGULATIONS ) 05-BSTD-1  
TITLE 24, PART 6, SECTION 118(i)3 )  
 )  
Re: Cool Roof Coatings )  
Performance Requirements )  
\_\_\_\_\_ )

CALIFORNIA ENERGY COMMISSION  
HEARING ROOM A  
1516 NINTH STREET  
SACRAMENTO, CALIFORNIA

MONDAY, APRIL 3, 2006

10:02 A.M.

Reported by:  
Peter Petty  
Contract No. 150-04-002

COMMITTEE MEMBERS

Jackalyne Pfannenstiel, Presiding Member

ADVISORS and COUNSEL PRESENT

Tim Tutt

STAFF and CONSULTANTS PRESENT

Elaine Hebert

William Pennington

ALSO PRESENT

Reed B. Hitchcock  
Roof Coatings Manufacturers Association

Chuck Scislo  
National Roofing Contractors Association

I N D E X

	Page
Proceedings	1
Opening Remarks	1
Background and Overview	1
CEC Presentation	3
Public Comments	8
R. Hitchcock, RCMA	8
C. Scislo, NRCA	8
Schedule	12
Closing Remarks	13
Adjournment	13
Reporter's Certificate	14

## P R O C E E D I N G S

10:02 a.m.

PRESIDING MEMBER PFANNENSTIEL: Good morning, I think we can begin. This is a California Energy Commission Committee hearing on cool roof coatings performance requirements.

I'm Commissioner Jackie Pfannenstiel; I'm the Presiding Commissioner on the Commission's Efficiency Committee.

Just for the record some background in this proceeding. On April 4, 2005, the Energy Commission received a petition to change the 2005 building energy efficiency standards, specifically section 118(i)3, performance requirements for liquid, field-applied, cool roof coatings for low-slope roofs.

Petitioners were a consortium of 23 manufacturers. They claimed that the adopted tests for low temperature performance unnecessarily restricted the number of qualified cool roof coatings.

Petitioners proposed that the Commission add a test for minimum flexibility so the coatings would meet either minimum elongation or minimum flexibility requirements at low temperatures,

1 increasing the number of qualifying coatings that  
2 would perform well in California's cooler  
3 climates.

4 April 13, 2005 the Energy Commission  
5 accepted the petition and initiated a rulemaking  
6 to consider the various proposed changes. Staff  
7 worked with the consortium and other stakeholders,  
8 resulting in amendments to table 118-C, to add the  
9 test for low-temperature flexibility.

10 The Commission released proposed 45-day  
11 express terms on May 6, 2005. In the course of  
12 the discussion several stakeholders had voiced  
13 concern about another portion of section 118(i)3.  
14 They claimed that the requirement for minimum  
15 applied thickness of 20 mils for field-applied  
16 liquid coatings was unreasonably high for products  
17 whose chemistries allowed a lesser thickness with  
18 at least the same performance and durability.

19 On June 7, 2005, the Efficiency  
20 Committee held a public meeting to hear comments  
21 formally. At this hearing industry and the  
22 Commission did not reach resolution on the issues,  
23 and the Committee directed the staff to continue  
24 working with industry and to propose further  
25 amendments.

1           The staff has spent the past eight  
2 months in discussions with industry members and  
3 reached agreement on proposed changes to the 45-  
4 day language. These changes are being presented  
5 today in preparation for proposing 15-day language  
6 for possible adoption by the full Commission.

7           If no negative substantive comments are  
8 heard today, or if such comments are deemed not  
9 persuasive, the staff will propose the changes  
10 being presented today as 15-day language for  
11 adoption later in April.

12           If persuasive substantive comments  
13 against the proposed changes are heard today, the  
14 Committee, which is Commissioner Rosenfeld and  
15 myself, will make appropriate decisions or direct  
16 staff on appropriate actions.

17           We have provided today a handout  
18 containing the proposed changes, and we'll review  
19 them now. I will ask Elaine Hebert from the staff  
20 to take the floor, but first let me ask if there  
21 are any questions on our background or proposed  
22 process.

23           Hearing none, Elaine.

24           MS. HEBERT: Thank you, Commissioner.

25           We'll get the room a little bit dark so we can see

1 the screen.

2 The language proposed originally for 45-  
3 day language is presented here in single underline  
4 and single strike-out, depending if we are adding  
5 or deleting language.

6 And then the proposed changes to 45-day  
7 language are shown in double underline and double  
8 strike-out.

9 And in addition to that I've put them in  
10 color to distinguish one from the other, just for  
11 ease of seeing.

12 We are proposing to add some ASTM,  
13 American Society of Testing Materials standards as  
14 part of the changes to section 118(i)3. And we  
15 list our ASTM standards in two places in the  
16 energy efficiency standards.

17 So we're proposing in these two  
18 sections, that's the definition section 101(b), to  
19 add the appropriate ASTM standards. And I won't  
20 go through these in detail. That's the first part  
21 because it comes numerically first, 101 comes  
22 before 118.

23 I'll shift to the end here because the  
24 second place where we list these ASTM standards is  
25 in the appendix at the end of the standards,

1 appendix 1(a). And these are listed by  
2 alphabetical order according to the organization  
3 that provides the standards. So in this case they  
4 would go under the American Society for Testing  
5 Materials. And you see we've added the  
6 appropriate ASTM standards there.

7 Now, let's look at section 118(i)3. In  
8 the very first sentence here -- oops, sorry about  
9 that -- liquid applied roof coatings applied, we  
10 clarified where, to low-sloped roofs. So we added  
11 that.

12 We divided this next section into (a)  
13 and (b) to clarify where these exceptions go.  
14 You'll see that we added the (b) here. That  
15 wasn't clear before. So we are adding 3(a) here,  
16 that liquid-applied roof coatings applied to low-  
17 sloped roofs in the field as the top surface of a  
18 roof covering shall (a) be applied across the  
19 entire roof surface to meet -- and this is the big  
20 change. We're taking out the minimum dry mil  
21 thickness of 20 mils to the minimum thickness or  
22 coverage recommended by the coating manufacturer.  
23 I'm sorry, we've struck minimum. It's the dry mil  
24 thickness or coverage recommended by the coating  
25 manufacturer. Taking into consideration the

1 substrate on which the coating is applied.

2 Item (b), and these coatings must meet  
3 the performance requirements listed in table 118-  
4 C, or the minimum performance requirements of ASTM  
5 C836, D3468, D6083, or D6694, whichever are  
6 appropriate to the coating material.

7 And Bill Pennington and I and some  
8 stakeholders looked at these ASTM standards quite  
9 closely to make sure that they were appropriate.

10 And then we added that the exception to  
11 these applies only to number B here, that aluminum  
12 pigmented asphalt roof coatings shall meet the  
13 requirements of the ASTM standards that were there  
14 already. We are proposing no changes here.

15 In exception 2, we had spelled out  
16 cement-based roof coatings and a number of mil  
17 thicknesses for different applications. And we  
18 think we've covered that by saying what the  
19 manufacturer recommends up here. So we've taken  
20 out that first sentence, left the rest, and found  
21 a couple more ASTM standards that are appropriate  
22 to cementitious coatings. That's C1583 and D5870.

23 In table 118-C, again in the title to it  
24 we added for low-sloped roofs for clarification.

25 And the red font shows what we had

1 originally proposed as 45-day language. Again,  
2 the blue double-underline, double-strike-out shows  
3 what we're adding as amendments to the proposed  
4 45-day language.

5 So we've added the test for initial  
6 flexibility ASTM D522 test B as an alternative to  
7 the initial percent elongation, which already we  
8 had D2370 up here. We pulled this out here and  
9 put it here with D522(b).

10 We did the same thing for initial  
11 tensile strength and initial flexibility, whereas  
12 up here it was elongation and flexibility. So,  
13 again, we've added D522 test B for the low-  
14 temperature, zero-degree test there, and the same  
15 thing is here.

16 We did the same for the final percent  
17 elongation and flexibility after 1000 hours of  
18 testing. Again, D522 test B for the zero-degree  
19 low-temperature. And we left that as an option  
20 for elongation at zero degrees. And we added the  
21 flexibility test for zero degrees.

22 And those are our proposed changes.

23 PRESIDING MEMBER PFANNENSTIEL: Are  
24 there questions, or may I just ask if anybody  
25 would like to speak to the staff proposed changes.

1 Please come up.

2 MR. HITCHCOCK: Reed Hitchcock,  
3 Executive Director of the Roof Coatings  
4 Manufacturers Association. I just wanted to  
5 address the Commission and the staff, Commissioner  
6 Pfannenstiel, Bill, Elaine, RCMA supports the  
7 changes that are proposed here.

8 And I wanted to specifically say that  
9 it's been a long road. We very much appreciate  
10 the willingness of the Commission and the staff to  
11 work with us on this, particularly Bill Pennington  
12 and Elaine Hebert.

13 I know everybody's tired of looking at  
14 this language. As you read through the history it  
15 was -- can't believe it's been a year. But the  
16 Roof Coatings Manufacturers Association does  
17 support the proposed changes, and that's about it.  
18 Just wanted to express that support and  
19 appreciation. Thank you.

20 PRESIDING MEMBER PFANNENSTIEL: Thank  
21 you very much.

22 Any others?

23 MR. SCISLO: Good morning. My name is  
24 Chuck Scislo; I'm the Senior Technical Director  
25 with the National Roofing Contractors Association.

1 And I do have a prepared statement, but before I  
2 read the prepared statement I'd like to ask  
3 Elaine, relative to those physical property  
4 performance tests that you're referencing, is  
5 there a reference in the code to fire resistance  
6 properties or fire performance? Somewhere else?

7 MS. HEBERT: No.

8 MR. SCISLO: Would there be reference in  
9 the Building Code to coatings complying with fire  
10 resistance properties?

11 MS. HEBERT: We looked at the rest of  
12 the building code where it references roofing  
13 materials, and coatings are not specifically  
14 spelled out. I think there is a section that  
15 talks about the whole roof assembly needing to  
16 meet fire spread ratings and all that.

17 It doesn't spell out what happens when  
18 there's not a whole assembly being looked at, when  
19 it's a reroofing situation or something and you're  
20 adding a coating. It doesn't -- we couldn't find  
21 any specific reference to how the roof coating and  
22 flame spread apply.

23 So I guess it goes back to the whole  
24 roof assembly being tested.

25 MR. SCISLO: Okay, so there is reference

1 to the assembly, as you altered it will be in  
2 compliance, or it should somehow attempt to be in  
3 compliance with fire resistant properties, so you  
4 don't alter the physical properties of that  
5 assembly, or open up the potential for fire  
6 hazard.

7 MS. HEBERT: It's California Building  
8 Code section 15, or chapter 15.

9 MR. SCISLO: Okay. Thank you. As I  
10 said good morning, the National Roofing  
11 Contractors Association would like to go on record  
12 at these proceedings to state that our California  
13 contractor membership has reported that since the  
14 enactment of revisions to the California Energy  
15 Code, Title 24, dated October 1, 2005, much  
16 confusion exists in the marketplace concerning  
17 several key points.

18 This includes interpretation of the  
19 California Energy Code specific and relative to  
20 reroofing. Confusion exists relative to  
21 statements about cool roofs.

22 Some contractors believe that only  
23 roofing systems designated with the CRRC label are  
24 allowed, when in fact they are not.

25 Confusion exists concerning the required

1 use of roof coatings over various roof system  
2 assemblies and whether the roof coatings provide  
3 fire resistance qualities as required by building  
4 code. I think, Elaine, you've clarified that a  
5 bit.

6 Confusion also exists among commercial  
7 building owners and their representatives  
8 regarding required roof specifications in  
9 reroofing situations complying with building code  
10 and Title 24. In fact, the NRCA has received  
11 copies of correspondence questioning the validity  
12 of compliance and enforcement from attorneys  
13 representing building owners.

14 As a participating member of a Title 24  
15 committee comprised of roofing manufacturers,  
16 roofing contractors and consultants, attempting to  
17 clarify and create an educational program directed  
18 towards roofing contractors and building code  
19 enforcement officials, we, too, have struggled to  
20 interpret the changes within Title 24 relative to  
21 roofing.

22 In closing I'd like to suggest that more  
23 emphasis be given to interpretation and  
24 clarification of Title 24 relative to reroofing so  
25 as to clear up this confusion as quickly as

1 possible. Emphasis should be given to compliance  
2 not only to the energy code, but equally, if not  
3 moreso, to the building code. I would suggest  
4 that someone from CEC be present at all future  
5 meetings of this committee to act as an  
6 interpreter of this code.

7 Thank you.

8 PRESIDING MEMBER PFANNENSTIEL: Thank  
9 you very much, sir; those are some useful  
10 comments. And I think we need to follow up on  
11 them.

12 MR. SCISLO: Thank you.

13 PRESIDING MEMBER PFANNENSTIEL: Further  
14 comments, questions?

15 Elaine, what is the next step, then, if  
16 this is continued?

17 MS. HEBERT: We have given interested  
18 parties till the end of today to provide comment.  
19 So we'll see if any more comments come in. And if  
20 some do that are relevant, we will advise you and  
21 Commissioner Rosenfeld.

22 If no negative persuasive comments come  
23 in, the next step is to release 15-day language  
24 and go forward with adoption of these proposed  
25 changes.

1                   PRESIDING MEMBER PFANNENSTIEL: And the  
2 earliest those could be adopted by the full  
3 Commission would be --

4                   MS. HEBERT: April 26th.

5                   PRESIDING MEMBER PFANNENSTIEL: -- April  
6 -- that business meeting?

7                   MS. HEBERT: Yes.

8                   PRESIDING MEMBER PFANNENSTIEL: Thank  
9 you. So that's the date that we're trying for?

10                  MS. HEBERT: Yes.

11                  PRESIDING MEMBER PFANNENSTIEL: Any  
12 further discussion? Hearing none, then this  
13 Committee meeting will be adjourned. Thank you.

14                  (Whereupon, at 10:13 a.m., the  
15 hearing was adjourned.)

16   --o0o--

17

18

19

20

21

22

23

24

25

CERTIFICATE OF REPORTER

I, PETER PETTY, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Hearing; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing, nor in any way interested in outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 5th day of April, 2006.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345