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10 MINUTES

11 SUBCOMMITTEE ON OUTDOOR LIGHTING STANDARDS

12 (PUBLIC WORKS AND TRANSPORTATION COMMITTEE)

14 Council Chamber

15 February 6, 200

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1 CONVENE: 9:03 a.m.

2 PRESENT: Councilmember Michael J. Molina, Chair  
3 Councilmember Charmaine Tavares,  
3 Vice-Chair  
4 Lee Altenberg, Member  
4 Hannah Bernard, Member  
5 Richard Chong, Member  
5 Mike Maberry, Member  
6 Warren McCord, Member

6 STAFF: Gary R. Saldana, Legislative Analyst  
7 Camille Sakamoto, Committee Secretary

8 ADMIN.: Robert Tam Ho, Assistant Chief,  
9 Department of Police (Out 9:30 a.m.)  
Lawrence Hudson, Captain, Department of  
Police

10 Lloyd Lee, Chief, Engineering Division,  
Department of Public Works and Waste  
Management (In 9:16 a.m.)

11 Cary Yamashita, Engineer, Engineering  
Division, Department of Public Works  
and Waste Management (Out 9:16 a.m.)

12 Greg Nakao, Electrical Inspection  
Supervisor, Department of Public Works  
and Waste Management

13 Howard Hanzawa, Engineer, Land Use and  
Codes Division, Department of Public  
Works and Waste Management

14 Patrick Matsui, Planning and Development  
Chief, Department of Parks and  
Recreation

15 Joseph Alueta, Planner, Department of  
Planning

16 Kelvin Kobayashi, Energy Specialist,  
Department of Management

17 Gregory J. Garneau, Deputy Corporation  
Counsel, Department of the Corporation  
Counsel

18 OTHERS: Richard Wainscoat, Specialist, University  
of Hawaii, Institute for Astronomy  
Bill George

19 Cathleen Natividad, Wildlife Biologist,  
Haleakala National Park

20 Phil Johnson, Design and Covenants  
Manager, Wailea Community Association

21 Steve Sutrov

22 Terryl Vencl, Executive Director, Maui

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1 Hotel Association  
2 Randy Piltz  
3 Randy Nakama, Maui Electric Company, Ltd.  
4 Brian Ige, Dowling and Company  
5 Rob Hoonan  
6 Additional attendees (3)

PRESS: ?

6  
7 CHAIR MOLINA: (Gavel.) The Subcommittee on  
8 Outdoor Lighting Standards for February 6 is  
9 now in session. For the record, we have in  
10 attendance the Vice-Chair of the Committee  
11 Councilmember Charmaine Tavares; Committee  
12 Members Mike Maberry; Warren McCord; Hannah  
13 Bernard; Rick Chong. Excused is Committee  
14 Member Lee Altenberg.

19 Good morning, Members.

20 ? : Good morning.

21 CHAIR MOLINA: And as before I proceed, the Chair  
22 would like to recognize Committee Member  
23 Altenberg, who has just arrived on the scene

24 Good morning, Mr. Altenberg.

25 ITEM NO. 1: OUTDOOR LIGHTING STANDARDS (MTSC )

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1       CHAIR MOLINA: Members, prior to public testimony I  
2                   want to provide just a brief overview of the  
3                   items we will be discussing at today's  
4                   meetings. Initially I'd like to focus on  
5                   setting additional meeting dates and then  
6                   work on prioritizing sections of the draft  
7                   bill for further review. This effort will be  
8                   a change from the initial focus of reviewing  
9                   the draft bill section by section. I'll give  
10                  you more insight on this once we've completed  
11                  testimony.

12                  We do have some members of the public  
13                  who would like to testify today. Additional  
14                  members of the public who would like to  
15                  testify, please come up to the secretary's  
16                  desk and sign up.

17                  Your testimony shall be limited to  
18                  three minutes. An additional minute to  
19                  conclude the testimony may be granted subject  
20                  to the discretion of the Chair. If testimony  
21                  is not completed, an additional three minutes  
22                  will be given after all others have been  
23                  heard. Testifiers are requested to state  
24                  their name for the record and to indicate who  
25                  they're representing.

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1                   And to minimize any disturbances during  
2                   the meeting, the Chair asks that you please  
3                   turn off all pagers or cellular phones or set  
4                   them to the silent mode.

5                   With that, we shall proceed with public  
6                   testimony. And first to testify we have from  
7                   the University of Hawaii Institute for  
8                   Astronomy, Mr. Richard Wainscoat to be  
9                   followed by Bill George.

10                  . . . BEGIN PUBLIC TESTIMONY . . .

11    MR. WAINS COAT: My name is Richard Wainscoat. I'm  
12                  an astronomer at the University of Hawaii  
13                  Institute for Astronomy. I'd like to just  
14                  briefly explain to you why astronomers favor  
15                  low pressure sodium lights.

16                  Astronomers strongly support all the  
17                  efforts that are being made to fully shield  
18                  lights and to only use whatever lighting is  
19                  necessary to limit of lighting. However, we  
20                  recognize that some pollution of the night  
21                  sky is inevitable because light reflects from  
22                  the ground into the sky.

23                  Every day about 100 tons of  
24                  interplanetary dust hits the earth, and from  
25                  that dust it's like microbe meteors, there is

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1           sodium. And that sodium is deposited into a  
2           layer in the atmosphere about 80 to 100  
3           kilometers above the surface. Charged  
4           particles from the sun hit the sodium layer  
5           and make it luminesce, a yellow-orange color,  
6           and the color is that you're all familiar  
7           with is that color, not a (\_\_\_\_\_) is not  
8           going to hurt you, that color.

9           Low pressure sodium light emits light  
10          through basically the same mechanism and  
11          therefore emits light at a part of the  
12          spectrum that is already naturally polluted,  
13          and this is the fundamental reason why  
14          astronomers prefer use of sodium, low  
15          pressure sodium because it's already, I  
16          guess, a somewhat (\_\_\_\_\_) compromised part  
17          of the spectrum.

18          The other reason why we prefer it is  
19          that it is nearly monochromatic. That means  
20          that we can avoid it by use of filters.

21          And I've prepared a simple  
22          demonstration. If I can sort of walk in  
23          front of the Committee Members and just show  
24          this, this light through the filter, it might  
25          be helpful. Is that okay?

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1 CHAIR MOLINA: It's a bit of an unusual request.

2 If you could conclude your testimony and

3 maybe you could do that as a follow up.

4 MR. WAINSCOAT: It might work from here. I don't

5 know. Can you see the --

6 CHAIR MOLINA: Okay.

7 ?: Yeah.

8 MR. WAINSCOAT: -- light from here? This is, I'm,

9 I'm simulating here a high pressure sodium

10 light or white light source and see, it

11 passes through this filter.

12 This is a sodium light and I think it's

13 quite clear it completely goes through it.

14 So we can, by -- with a low pressure sodium,

15 we can in a lot of cases be completely immune

16 from light pollution.

17 If it's a metal halide lamp, high

18 pressure sodium or mercury lamp, we can't

19 avoid it. They have spectral lines and

20 emissions all over the spectrum. And in

21 particular, the blue part of the spectrum is

22 very precious for astronomers because the sky

23 is very dark in the blue.

24 So lamps like, like mercury, metal

25 halide and to a lesser extent high pressure

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1           sodium emit a lot of light in the blue and  
2           are very detrimental to astronomers.

3           So in conclusion, the, the worst lights  
4           for astronomy are clearly mercury and metal  
5           halide lamps because they have emission lines  
6           at many places over the spectrum, they  
7           destroy our ability to look at (\_\_\_\_\_)  
8           Spectral features meaning plain objects.

9    MR. SALDANA: Three minutes.

10   CHAIR MOLINA: Continue.

11   MR. WAINSCOAT: Okay.

12   CHAIR MOLINA: Okay. Thank you, Mr. Wainscoat.

13           Subcommittee Members, any questions for  
14           the testifier? Hearing none, thank you. And  
15           for your information, Mr. Wainscoat has  
16           provided a written testimony of his  
17           presentation today for you.

18           Next to testify we have Bill George to  
19           be followed by Cathleen Natividad.

20    MR. GEORGE: Aloha, Chairman Molina. Aloha,  
21           Councilmember Tavares. Aloha, Committee  
22           Members. My name is Bill George. I wanted  
23           to clarify I'm speaking as a private citizen.  
24           I'm representing only myself.

25           I was looking on the internet last

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1           night and the only reason why I'm talking is  
2           I found an article about, that was written in  
3           a New York paper and it says, "Saturday, the  
4           2nd of February, year zero two, 2002,  
5           Governor Pataki vetoed Assembly Bill 5352 and  
6           Senate Bill 3386, a proposed New York State  
7           lighting ordinance."

8           His reasons centered on these three  
9           things, and one was the cost; the liability  
10          for light trespass; and extra work. That was  
11          his words, "extra work that local authorities  
12          would have taken on to enforce this bill."

13          That's my testimony. I just wanted to  
14          show you. I went and purchased a 35 watt low  
15          pressure sodium light and this is the size of  
16          the fixture and it cost \$255.07.

17          For the same type of fluorescent  
18          fixture, I can spend about \$45 and, and it  
19          would be like one third the size of this, so  
20          it just kind of gives you a feeling of it.  
21          And if you guys want to later, you can plug  
22          in and actually see the lighting, the  
23          lighting changes. It's pretty heavy. It has  
24          its own special ballast and its own  
25          capacitor, so it's a different type of

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1           lighting system.

2           But somebody remaked that it might be  
3           the only one on Maui right now. I don't know  
4           if there are any others, but to let you know,  
5           this is only a 35 watter, so the size goes  
6           up.

7           Another thing that I did find out is  
8           the bulb needs special hair -- care and  
9           handling. There was a whole mess of  
10          literature. I've got it on it on how to  
11          handle the bulb and disposal, so it's  
12          something to think about.

13           Thank you.

14    CHAIR MOLINA: Thank you, Mr. George. Committee  
15          Member Bernard?

16    COMMITTEE MEMBER BERNARD: Yes. A point of  
17          clarification. So this is a low pressure  
18          sodium light?

19    MR. GEORGE: Yes.

20    COMMITTEE MEMBER BERNARD: So it would be yellow to  
21          our eyes, yeah?

22    MR. GEORGE: Yes.

23    COMMITTEE MEMBER BERNARD: And so the high pressure  
24          sodium would be white?

25    MR. GEORGE: High pressure sodium is more a -- I, I

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1           don't know light that well but it is more of  
2           a pinkish, that pinkish glow.

3 COMMITTEE MEMBER BERNARD: Okay.

4 MR. GEORGE: Metal halide is the whiter bright.

5 CHAIR MOLINA: Okay.

6 MR. GEORGE: Any other questions?

7 CHAIR MOLINA: Okay. Mr. Maberry followed by Mr.  
8           Altenberg.

9 COMMITTEE MEMBER MABERRY: Mr. Chairman, would it  
10          be appropriate at this time to, to have a  
11          look and see what it looks like?

12 CHAIR MOLINA: Okay. Well --

13 COMMITTEE MEMBER MABERRY: Or would you rather do  
14          it later on?

15 CHAIR MOLINA: Let's, let's do our questioning  
16          first.

17 COMMITTEE MEMBER MABERRY: Thank you.

18 CHAIR MOLINA: And then right after we're done with  
19          our questioning, I guess we could have Mr.  
20          Gorge give us a brief demonstration on that.

21          Okay. Dr. Altenberg?

22 COMMITTEE MEMBER ALTENBERG: Let's see. A question  
23          about the -- you were comparing it with a  
24          fluorescent, is that a fluorescent wall pack?

25 MR. GEORGE: It's a compact fluorescent. It's a --

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1           The one I was comparing it with, the closest  
2           one, was 27 watt. It's a spiral, double  
3           spiral helix unit.

4    COMMITTEE MEMBER ALTENBERG: Okay. 27 watts, that  
5           would be roughly half the lumen of this unit,  
6           I would believe; isn't that correct?

7    MR. GEORGE: I'm not, I'm not technically --  
8           Somebody else might know. I'm not  
9           technically where it is.

10   COMMITTEE MEMBER ALTENBERG: Yeah.

11   MR. GEORGE: I was just trying to find a bulb that  
12           was approximately the same light output of --  
13           Rick seems to have a catalogue there so he  
14           might be able to look it up real fast.

15   COMMITTEE MEMBER ALTENBERG: But I would also like  
16           to see it lit up in here.

17   CHAIR MOLINA: Sure.

18   COMMITTEE MEMBER ALTENBERG: Thank you.

19   CHAIR MOLINA: Members, any other questions for Mr.  
20           George at this time?

21           Okay. Mr. George, if you want to go  
22           ahead and give us a brief demonstration and  
23           show us, show the Committee what this lamp  
24           looks like.

25   ?: This is watts. It doesn't take -- It doesn't

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1 say how much light it is because isn't that  
2 more in lumen? Because all incandescent  
3 light (\_\_\_\_\_)

4 MR. GEORGE: This is the start-up color. It takes  
5 five to 15 minutes, well, seven to 15 minutes  
6 to warm up. We did notice yesterday when we  
7 were testing it in my office that the fire  
8 extinguishers looked great; the floor, we  
9 couldn't really tell depth perception because  
10 it's all one color. You can't see -- Anyway,  
11 it will take a while to warm up.

12 ?: Perhaps we could revisit this once the light  
13 has warmed up.

14 CHAIR MOLINA: Okay. All right. Good suggestion.  
15 How long does it normally take to warm up?

16 MR. GEORGE: I'm thinking about 12, 15 minutes.

17 CHAIR MOLINA: Okay. We'll do testimony in the  
18 meantime. Thank you, Mr. George. Appreciate  
19 your effort with this.

20 Next to testify we have Cathleen  
21 Natividad to be followed by Phil Johnson.

22 MS. NATIVIDAD: Good morning.

23 CHAIR MOLINA: Morning.

24 MS. NATIVIDAD: I am Cathleen Natividad. I  
25 represent Haleakala National Park where I am

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1           a wildlife biologist.

2           I have a draft letter here from Donald  
3           Reeser that I'd like to read. Unfortunately  
4           it is draft so he will be sending out the  
5           final letter.

6           "This letter is in support of the draft  
7           Maui Outdoor Lighting Standards version 1.03  
8           written by the Ad Hoc Maui Committee for  
9           Outdoor Lighting Standards.

10          The National Park Service, Haleakala  
11          National Park is concerned about outdoor  
12          lighting that adversely affects two important  
13          resources: The federally elected endangered  
14          Hawaiian dark-rumped Petrel and the night  
15          sky.

16          Hawaiian dark-rumped Petrels, also  
17          known by the Hawaiian name uau, are  
18          endangered sea birds that nest at Haleakala  
19          National Park. Haleakala National Park is  
20          home to the world's largest protected nesting  
21          population of uau. The uau fly from the  
22          ocean to their nests at Haleakala just after  
23          sunset and leave their nests just before  
24          dawn.

25          Each year during October and November

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1           fledgelings, which are the young birds, leave  
2           their nest for their first solo flight. They  
3           are thought to navigate by the stars. The  
4           fledgelings are confused by bright lights,  
5           such as the high pressure sodium, and fall to  
6           the ground. Once grounded, the birds may  
7           become injured or killed. Our data indicates  
8           that an average of 16 uau become confused by  
9           the outdoor lights and grounded each year.  
10          Of these, about three, which is 19 percent,  
11          die.

12           The uau population at Haleakala has  
13          been increasing at a very low rate since  
14          1962, that's 40 years ago. However, a slow  
15          rate of increase does not indicate a  
16          recovered population. Species such as the  
17          uau that are in danger of extinction are so  
18          because of this very slow rate of increase.  
19          Any adverse affects to the population can  
20          cause a reverse in the increasing trend.

21           The night sky is another valuable  
22          resource. There are very few places in the  
23          world with quality visibility of the night  
24          sky and Haleakala is one of these very few  
25          places. The National Park Service recognizes

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1           this and offers programs for visitors to view  
2           the night sky.

3           Since outside lighting adversely  
4           affects the uau and the night sky, the  
5           National Park Service supports standards to  
6           minimize light pollution in Maui County.

7           Sincerely, Donald W. Reeser,  
8           Superintendant.

9    CHAIR MOLINA: Thank you very much. Any questions  
10      for the testifier? Ms. Bernard followed  
11      by Mr. Maberry and Mr. Chong.

12    COMMITTEE MEMBER BERNARD: Thank you, Ms.  
13      Natividad. What percentage did you say were  
14      downed per year? What number and then what  
15      percentage die?

16    MS. NATIVIDAD: About 16 per year, that's an  
17      average. We've had a high of 28, sometimes  
18      30. And about three die per year, which is  
19      about 19 percent of the 16.

20    COMMITTEE MEMBER BERNARD: Do you have any sense  
21      for how many that you don't even know about  
22      that are downed, like for instance, I've  
23      gotten phone calls about them and people  
24      don't know what to do with these birds and  
25      they don't really understand them. And

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1           sometimes they're just taking them themselves  
2           back to the water or something. They don't  
3           even know what to do with them. So do you  
4           have any sense for --

5   MS. NATIVIDAD: Well, all I know is when we first  
6       started this program ten years ago we only  
7       got calls for three birds per year and it's  
8       slowly increased, so I'm guessing there's  
9       probably -- I have no no idea how many birds.

10   COMMITTEE MEMBER BERNARD: But there could be some?

11   MS. NATIVIDAD: Oh, yeah. There could be --

12   COMMITTEE MEMBER BERNARD: That no one knows are  
13       downed by the lights?

14   MS. NATIVIDAD: Right.

15   COMMITTEE MEMBER BERNARD: Thank you.

16   CHAIR MOLINA: Thank you. Mr. Maberry?

17   COMMITTEE MEMBER MABERRY: You're a biologist by  
18       profession?

19   MS. NATIVIDAD: Yes.

20   COMMITTEE MEMBER MABERRY: Is that true? Do you,  
21       do you have any, any data or any feel for  
22       which particular type of light that  
23       interferes with them most?

24   MS. NATIVIDAD: Yeah.

25   COMMITTEE MEMBER MABERRY: The birds.

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1 MS. NATIVIDAD: This is anecdotal observation that  
2 I've done in the last 13 years. When I look  
3 down when there's no moon, I don't know what  
4 kind they are, the bright white ones that  
5 point up to the sky. Those look just like  
6 stars. If I were a bird, which I'm not, but  
7 if I were, that's what the lights look like.  
8 They look like the stars and I can see how if  
9 a bird navigates using the stars would be  
10 confused by these bright lights from down  
11 below.

12 COMMITTEE MEMBER MABERRY: Thank you.

13 CHAIR MOLINA: Okay. Thank you, Mr. Maberry.

14 We have Mr. Chong to be followed by Dr.  
15 Altenberg.

16 COMMITTEE MEMBER CHONG: So the issue with the  
17 birds and maybe have -- This is a question  
18 that came up last week or a couple weeks ago  
19 when Hannah wasn't here.

20 To any wildlife, it's light trespass  
21 and not necessarily the type of light; in  
22 other words, whether it's low pressure sodium  
23 or high pressure sodium, if it's too bright  
24 and that, and that needs to be defined  
25 probably, the birds would have a problem with

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1           that.

2   MS. NATIVIDAD: Because I'm not familiar with  
3           lighting, all I know is the white ones that  
4           look like stars, I don't know if they're  
5           bright or not bright, I don't know. Sorry.

6           I probably don't --

7   COMMITTEE MEMBER CHONG: Okay.

8   MS. NATIVIDAD: -- understand your question.

9   COMMITTEE MEMBER CHONG: And I guess what I'm  
10          trying to clarify is if we did low pressure  
11          sodium, I can make a low pressure sodium  
12          light appear glaring, and is that still going  
13          to cause the wildlife problem?

14   MS. NATIVIDAD: I don't, I couldn't answer that.

15   COMMITTEE MEMBER CHONG: Okay. And that -- I  
16          wanted to make a point.

17   CHAIR MOLINA: Thank you, Mr. Chong. Mr. Altenberg  
18          to be followed by Ms. Bernard.

19   COMMITTEE MEMBER ALTBENBERG: That was already my  
20          question.

21   CHAIR MOLINA: Okay. Ms. Bernard, question.

22   COMMITTEE MEMBER BERNARD: Yeah. We've, we've  
23          distributed this little reprint from the  
24          brochure that Hawaii Wildlife Fund and  
25          Hawaii -- Maui Electric Company produced on

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1           lighting as it affects sea turtles. And for  
2           the page of, the relevant to your question is  
3           the one that was copied and it should, it  
4           should begin with the title "A Guide to  
5           Turtle Friendly Coastal Lighting."

6           And if you go all the way to the bottom  
7           of this page, you'll see the little box that  
8           says the lights that should be avoided. And  
9           so whether it's -- it doesn't so much depend  
10          on the brightness. A flashlight, a little  
11          flashlight that is a white light that's  
12          incandescent can, can affect a sea turtle;  
13          whereas we've use red covered lights or the  
14          yellow lights don't appear to affect them,  
15          and I'm not sure if it's an issue of what  
16          they're able to actually see or whether it  
17          just doesn't seem to bother them as much.

18           So it is the color of the light that  
19          does affect at least sea turtles. I can't  
20          speak to birds but certainly for sea turtles,  
21          and I would imagine that it would be similar  
22          with birds as well.

23          CHAIR MOLINA: Okay. Thank you.

24          MS. NATIVIDAD: May, may I add to that to clarify  
25          Mr. Chong's (\_\_\_\_\_)?

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1 CHAIR MOLINA: Proceed.

2 MS. NATIVIDAD: I see where you're coming from.

3                   Similarly, it's not the, it's not the  
4                   brightness, it is the color, that white that  
5                   looks like stars. And the direction that  
6                   it's pointed, if it's pointed upwards toward  
7                   the sky. If it's pointed down, I guess it  
8                   doesn't really matter, it doesn't glare out  
9                   towards the sky. It doesn't seem to have any  
10                  effect on the birds, but if it's pointed up  
11                  and it's that white color, whether it's  
12                  bright or not, it does have an affect.

13 CHAIR MOLINA: Thank you. Committee Members, any  
14                  other questions for the testifier? Hearing  
15                  none, thank you very much.

16 MS. NATIVIDAD: Thank you.

17 CHAIR MOLINA: Okay. We have Phil Johnson of the  
18                  Wailea Community Association to be followed  
19                  by Steve Sutrov.

20 MR. JOHNSON: Mr. Chair, Committee Members, I'm  
21                  Phil Johnson. I'm the Design and Covenants  
22                  Manager for the Wailea Community Association.  
23                  I represent the Design Industry Review  
24                  Committee. I brought a little map here of  
25                  Waialae. I have written testimony that I've

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1           already submitted to the, to the Chair.

2           The Waialae Community Association is  
3           very concerned with two issues of this  
4           lighting standards. We think there are many  
5           very good and valid points of this proposed  
6           legislation. However, our two major concerns  
7           are the impact on the resort and on the  
8           beach, the beach access itself.

9           Wailea has a beach access pathway along  
10          the entire shoreline that is mandated by an  
11          SMA and it is also mandated to be lit by SMA.  
12          There are no lighting standards within that  
13          mandate but it is required for safety and  
14          access.

15          We also are very concerned with Section  
16          050-A, General Exemptions, which would  
17          include not having any lighting on the beach  
18          at all. All of the resorts, hotels that I  
19          represent are very concerned with this  
20          section in that there is almost no way to  
21          control the beaches without lighting. There  
22          are two police officers in all of South Maui  
23          at night-time, and no lights and two police  
24          officers, a potential horrible situation is  
25          possible.

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1                 Also the resorts do not have any  
2                 control or jurisdiction on to the beaches  
3                 themselves, it is only the police department  
4                 that can respond to any kind of altercation  
5                 any event, so lighting is a very important  
6                 element for all of the resorts to be able to  
7                 deter any kind of event happening there.  
8                 That wouldn't be helpful.

9                 The other section that we're very  
10               concerned with is Section 080-D, luminary  
11               standards. This is the 100 meter area that  
12               is going to be included in all of the coastal  
13               shoreline. I've outlined that (\_\_\_\_\_) in  
14               red.

15               This 100 area -- This 100 meters  
16               encompasses a large majority of all of the  
17               resorts. It encompasses all of Polo Beach  
18               Club; all of the Villas at the Kealani; all  
19               of the shorefront condos at the Point; a  
20               majority of the water features and  
21               restaurants at the Grand Wailea; the water  
22               features at the, and the restaurants at the  
23               Four Seasons; a large section of the  
24               Outrigger Hotel including lanais and  
25               restaurants and luau grounds. It encompasses

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1           luau grounds in all of the resorts; a large  
2           section of the Ilua Condominiums, pools,  
3           beach clubs and condominiums themselves.

4           If I'm reading -- The way I'm reading  
5           this section, things like overhead fan lights  
6           that are in a condominium that would be  
7           within this section that is seen from the  
8           beach would not be allowed.

9    MR. SALDANA: Three minutes.

10   MR. JOHNSON: Table lights that are within a  
11       condominium that are seen from the beach or  
12       the ocean would not be allowed.

13           This represents a tremendous impact, I  
14       think, on the resort and an enforcement  
15       problem that, I think, is astronomical.

16           Just the idea of water features, how do  
17       we, how do you deal with water features that  
18       have lights in them that are seen from the  
19       beach or seen from the ocean? It represents  
20       ideas that I do not even know how we could  
21       address how to change and how to control or  
22       even how to design.

23           Walking through the area at night,  
24       there are literally thousands of light  
25       fixtures that would have to be changed, just

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1           not simply just replacing light bulbs. There  
2           would be a major economic impact. It would  
3           also be a major impact to the overall  
4           ambiance of the resorts themselves.

5    MR. SALDANA: Four minutes.

6    CHAIR MOLINA: Okay. Mr. Johnson, would you like  
7           come back for an additional three minutes?

8    MR. JOHNSON: No, I think that pretty well wraps it  
9           up unless anyone has any questions.

10   CHAIR MOLINA: Okay. Committee Members, any  
11           questions for Mr. Johnson? Ms. Bernard  
12           followed by Mr. Altenberg, Mr. Chong and Mr.  
13           Maberry.

14   COMMITTEE MEMBER BERNARD: Point of clarification.  
15           Our ordinance that we're discussing, it's not  
16           to eliminate light? Is, is my understanding  
17           correct --

18   CHAIR MOLINA: Or to reduce.

19   COMMITTEE MEMBER BERNARD: -- that we're talking  
20           about shielding light and changing wattage  
21           and changing colors of light in order to  
22           reduce the glare both on the beaches and on  
23           the night sky; am I correct?

24   CHAIR MOLINA: Right.

25   COMMITTEE MEMBER BERNARD: I just wanted to be

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1           clear because I, I did hear you mention  
2           something about no light and I just wanted to  
3           be clear that we wern't talking about no  
4           light.

5    CHAIR MOLINA: Right.

6    COMMITTEE MEMBER BERNARD: Okay. Thank you.

7    CHAIR MOLINA: Thank you. Dr. Altenberg?

8    COMMITTEE MEMBER ALTENBERG: Here's a question.

9           Talousa County, Florida, which includes  
10          Daytona Beach, is a major resort area and the  
11          current code there designed for protecting  
12          sea turtles says that, this is for existing  
13          development, "Light fixtures shall be  
14          designed, positioned, shielded or otherwise  
15          modified such that the source of light and  
16          any reflective surfaces of the fixtures shall  
17          not be visible by a person who is in a  
18          standing position on the beach. And light  
19          shall not directly or indirectly illuminate  
20          the beach during the sea turtle nesting  
21          season."

22           So these are perhaps even more -- Well,  
23          it's a little different way of coding, coding  
24          the same protection for the sea turtles, but  
25          how do you suppose that that being a resort

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1           area has managed to deal successfully in  
2           protecting the sea turtles under this kind of  
3           ordinance?

4    MR. JOHNSON: I couldn't possibly guess. I don't  
5           know. I wouldn't -- I have no information  
6           or --

7    COMMITTEE MEMBER ALTENBERG: Yeah.

8    MR. JOHNSON: I don't know anything about that  
9           resort.

10   CHAIR MOLINA: Okay. Thank you. We have Mr. Chong  
11           to be followed by Mr. Maberry.

12   COMMITTEE MEMBER CHONG: Just for clarification and  
13           this is a question probably to the ad hoc  
14           committee who wrote the rough draft. This  
15           rough draft deals with outdoor exterior  
16           lighting and not lights that are within any  
17           interior space; am I correct or am I wrong?

18           If, if you have a light, like you said a fan  
19           light or something that is inside your dining  
20           room that can be seen from the beach, does  
21           this ordinance apply to that light fixture or  
22           it does not? My impression is it does not.

23           This ordinance is particularly for luminaires  
24           that are mounted in the exterior environment  
25           or on surfaces of buildings on the outside of

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1           the building and not on the inside of the  
2           building.

3   CHAIR MOLINA: Yeah, at this point I think what  
4           we're trying to focus on is more staying  
5           away -- Well, as we're proceeding with our  
6           meetings, staying away from residential  
7           issues, more so I would think fixtures that  
8           are outside of, of the home.

9   COMMITTEE MEMBER CHONG: Okay. I mean --

10   CHAIR MOLINA: Yeah.

11   COMMITTEE MEMBER CHONG: Part of his concern is --

12   CHAIR MOLINA: Go ahead.

13   COMMITTEE MEMBER CHONG: -- lights inside too, I  
14           believe.

15   CHAIR MOLINA: Mr. Johnson, any comments on that?

16   MR. JOHNSON: Well, that is -- I think that's the  
17           point that needs to be clarified because  
18           there are certainly places within all of the  
19           structures that are close enough that would,  
20           light would be seen from, from the ocean and  
21           from the beach.

22   CHAIR MOLINA: Okay. Thank you, Mr. Chong, Mr.  
23           Maberry followed by Ms. Bernard.

24   COMMITTEE MEMBER MABERRY: Sir, do you ever any  
25           restrictive covenants regarding light

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1           trespass within your area?

2    MR. JOHNSON: Yes, we do.

3    COMMITTEE MEMBER MABERRY: So you have restrictions  
4           on neighbors from illuminating or trespassing  
5           onto other neighbors' properties? Do you  
6           consider the sealife along the beach to be  
7           your neighbors?

8    MR. JOHNSON: We do indeed and we also consider the  
9           resort and the economic well-being of the  
10          resort part of the life blood of this island.

11   COMMITTEE MEMBER MABERRY: Do you recognize Maui as  
12          being what, the number one place, the number  
13          one island destination? It's, Waikiki is not  
14          very high on that list, is it?

15   MR. JOHNSON: I understand.

16   COMMITTEE MEMBER MABERRY: Okay. That's sort of my  
17          point. I, I think we have a resource here  
18          that we need to protect in order for the  
19          resorts to continue to enjoy that ranking.

20          Thank you.

21   CHAIR MOLINA: Okay. Ms. Bernard?

22   COMMITTEE MEMBER BERNARD: Point of clarification.  
23          We are talking about dealing with outdoor  
24          lighting; however, we are talking about  
25          reducing light trespass and glare out on the

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1           beaches to protect the nesting habitat of our  
2           sea turtles.

3           And one of the things that we did was  
4           to get this brochure on lighting distributed  
5           to the hotels and condos of South Maui where  
6           we were more concerned about this issue  
7           before we knew that greens were now starting  
8           to nest on the west side.

9           And we were looking to see if we could  
10          just get voluntary compliance to get folks  
11          who have residences on the beaches just to  
12          participate on a voluntary level to reduce  
13          their lighting, closing their curtains,  
14          shielding their lights, using timers and that  
15          kind of thing, and it hasn't been very  
16          successful. Sometimes we need the force of  
17          law to support efforts to protect our, our  
18          endangered species.

19        CHAIR MOLINA: Any comments from you to that, Mr.  
20           Johnson?

21        MR. JOHNSON: I guess it's a, it's certainly an  
22          important issue. I think everyone is  
23          concerned with the environment. I think the  
24          resorts have, have long been concerned with  
25          the environment. They have pioneered doing

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1           recycling on this island and, and they still  
2           do at a cost to them.

3           I think that all of the resorts are  
4           very concerned with the well-being here.

5           We're also very concerned with the safety and  
6           risks and the well-being of the guests too,  
7           and somewhere there has to be a balance in  
8           that.

9    CHAIR MOLINA: Thank you. Committee Members, any  
10       other questions for testifier? Seeing none,  
11       thank you, Mr. Johnson.

12    MR. JOHNSON: Thank you.

13    CHAIR MOLINA: Okay. Our last testifier for today  
14       is Steve Sutrov.

15           The Chair would like to ask if there is  
16           anybody else in the gallery that would like  
17           to testify, please do so now and come up and  
18           sign up at the secretary's desk.

19    MR. SUTROV: Good morning, Committee Members,  
20       Chairman Molina. My name is Steve Sutrov.  
21       I'm here to testify on behalf of myself. I  
22       just have just a few comments.

23           I'd just like to kind of reiterate why  
24       I believe we're here at in these proceedings  
25       addressing this draft real quick right now.

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1           I think we, we all agree we have a problem on  
2           Maui and not only on Maui, in Kauai, in our  
3           nation, around the world with the types of  
4           lighting abuse that has been going on for the  
5           last 100 years or so.

6           We've had lighting involving to the  
7           point to where energy used to be cheap and,  
8           and even the Lighting Engineering Society has  
9           admitted that it's, the problem we have today  
10          is partially their fault just by designing  
11          and implementing more and more light thinking  
12          that more light is better than less light.

13          But now the concept is you ought to use  
14          the right type of lights, the right types of  
15          bull, the right fixtures and the right  
16          applications to satisfy what is correct.

17          And so on Maui we have a problem. We  
18          have a problem with the environmental  
19          problems with our wildlife, with our, our  
20          observatories, with Maui being basically a  
21          very sensitive environmental community with a  
22          very -- where visitors come here from around  
23          the world to visit our community because of  
24          its natural beauty.

25          And then we have problems with the

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1           resorts saying they have to light up the  
2           beaches for security. Now, that is something  
3           I think the whole Council is going to want to  
4           talk about in length. Why do we have a  
5           problem where we have to light up public  
6           areas with lights because we don't have  
7           adequate surveillance from our police  
8           department? Not to criticize the police, I  
9           understand their predicament living in Kula  
10          and then lobbying for more police in that  
11          area and working closely with community  
12          police officers.

13           But I understand that problem, but it  
14          is something that needs to be discussed at  
15          length. We should not have to light up all  
16          the public areas, the beaches out of fear.  
17          That does not send the right message to our  
18          visitor industry and to our visitors that  
19          come here.

20           Have you ever -- I'd like to know, I'm  
21          sure some of you, I hope, have been up to the  
22          crater, maybe spent the night inside the  
23          crater, lay on your back at night and look at  
24          the stars on a moonless night. You don't  
25          need light. You don't need the moon to walk

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1           the trail, the level trail there. It's  
2           beautiful up there. It's so bright just from  
3           natural stars, and your eyes become  
4           accustomed to the dark. And it's something  
5           that the visitors come here from all over the  
6           world to experience.

7           Or if you've ever been down at the  
8           beach at night with your family or your kids  
9           and on a moonless night without any other  
10           lights around on your back in the sand  
11           listening to the waves and looking at the  
12           stars. I have.

13          MR. SALDANA: Three minutes.

14          MR. SUTROV: Can I have another three minutes?

15          CHAIR MOLINA: Go ahead, Steve. Proceed.

16          MR. SUTROV: I'm not going to need that much, I  
17           don't think, but to experience that on Maui,  
18           it's something the visitors come here to  
19           experience. They don't come here to  
20           experience a walk to the beach with blaring  
21           lights from behind you going down to put your  
22           feet in the water. They come here to  
23           experience the natural beauty of the island.

24           You know, and it's hard for people that  
25           live in the city to believe this and

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1           understand this. If you live in Honolulu, it  
2           would be real hard to do that. But to  
3           understand why people come here to take bike  
4           tours from the summit going down. You know,  
5           it's a natural experience, you know. And to  
6           take a hike to the crater or through Polipoli  
7           Forest or to go to the beach. It's the same  
8           thing.

9           There is a, there is something that I  
10          would like to touch on quickly. There are  
11          some opponents to this parts of this  
12          legislation, this draft and that is basically  
13          the Lighting Engineering Society is against  
14          low pressure sodium. They have no qualms  
15          with saying that. They do not like it. They  
16          can't sell it. It cuts into their finances  
17          big time when they have to talk to designers  
18          go into it and try to apply low pressure  
19          sodium into a project. They prefer using  
20          white light. It's what they can sell to  
21          their clients.

22          So for years they've been discounting  
23          the value of low pressure sodium and now they  
24          are substantiating it with their own studies  
25          to prove it. And so they are a proponent to

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1           this, plus the police where I understand  
2           their point of view.

3           But there is accounts from San Diego  
4           and from Tucson just recently that they've  
5           come out saying that there is no problem with  
6           the police force with no low pressure sodium.  
7           All you do is you add a little more white  
8           light where you need it or increase the  
9           intensity where you need it and it works out  
10          just fine after an adjustment period.

11          And so we need to look at the real  
12          issues here, Maui being an environmentally  
13          sensitive area and we need low pressure  
14          sodium for that reason and full cut-off  
15          fixtures under all applications. That is  
16          highly possible. Thank you very much.

17    CHAIR MOLINA: Thank you, Mr. Sutrov. Members,  
18          questions? Mr. Maberry?

19    COMMITTEE MEMBER MABERRY: Mr. Sutrov, you live in  
20          Kula?

21    MR. SUTROV: Yes, I do.

22    COMMITTEE MEMBER MABERRY: How, how many years have  
23          you lived in Kula?

24    MR. SUTROV: I've lived in Kula for 18 years and  
25          before that, Makawao and Olinda.

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1 COMMITTEE MEMBER MABERRY: As you look down from  
2 the mountain, what areas have you noticed  
3 taht seem to -- or have you noticed any, any  
4 new light pollution in that period of time?

5 MR. SUTROV: New light sources or -- Well, from  
6 where I live I get a view of looking towards  
7 the airport, across Kahului, Wailuku and a  
8 little bit of West Maui and obviously the,  
9 the city, Kahului street lights, airport  
10 lights and four stadiums and, and I think the  
11 quarry lights are on all night now are very,  
12 very bright, and so basically the stadium  
13 lights, street lighting are the main  
14 offenders at this time.

15 CHAIR MOLINA: Thank you, Mr. Maberry. Committee  
16 Members, any other questions for the  
17 testifier? Dr. Altenberg?

18 COMMITTEE MEMBER ALTBENBERG: Would it be possible  
19 to ask questions from people who have already  
20 testified?

21 CHAIR MOLINA: We can maybe do that during the  
22 discussion phase.

23 COMMITTEE MEMBER ALTBENBERG: Okay.

24 CHAIR MOLINA: At that point.

25 COMMITTEE MEMBER ALTBENBERG: Thanks.

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1 MR. SUTROV: One quick statement, Mike.

2 CHAIR MOLINA: Go ahead.

3 MR. SUTROV: Okay. I'd, I'd like to because it's  
4 not (\_\_\_\_\_) acceptable at times to ask a  
5 Committee to a site inspection, I'd like to  
6 invite this Committee to the summit on a  
7 moonless night. Maybe a small hike down  
8 inside. Anybody mind?

9 CHAIR MOLINA: We'll, we'll keep that in mind.

10 Thank you.

11 Okay. At this point is there anyone  
12 else in the gallery that would like to  
13 testify? Seeing none, the Chair will close  
14 public testimony for today.

15 . . . END OF PUBLIC TESTIMONY . . .

16 CHAIR MOLINA: Okay. Members, before I proceed  
17 with the rest of the meeting, the Chair would  
18 like to call for a five minute recess.

19 (Gavel.)

20 RECESS: 9:40 a.m.

21 RECONVENE: 9:46 a.m.

22 CHAIR MOLINA: (Gavel.) The Subcommitteee on  
23 Outdoor Lighting Standards is now back in  
24 session.

25 Thank you. Members, if, those of you

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1           who are on the Subcommittee and Resource  
2           Personnel, please come on up and take a look  
3           at what the low pressure sodium light, how it  
4           affects the color of red. We're using the  
5           American flag as an example, so if you'd like  
6           to come up and take a look.

7           Mr. George, if you'd like to go ahead  
8           and add some additional comments to this.

9    MR. GEORGE: I was just saying look at the carpet.  
10       It's normally red. That's what you're going  
11       to see everywhere. Everything is going to be  
12       that color. I, I can't see the red. I don't  
13       know if anybody can see the red.

14   ?: (\_\_\_\_\_) the farther away from it.

15   ?: No, same color.

16   MR. GEORGE: Look at the Hawaiian flag too.

17       (\_\_\_\_\_) It just washes it out.

18   COMMITTEE MEMBER MABERRY: Mr, Mr. Chairman, while  
19       we're at it, can we put the filter in front  
20       of it?

21   ?: Do you want to hand the filter --

22   ?: Try to hold it like this.

23   CHAIR MOLINA: If I may ask, what will the filter  
24       do, it will turn it into --

25   ?: (\_\_\_\_\_) Can't hear.

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1 COMMITTEE MEMBER CHONG: The, the filter is a green  
2 filter and will not transmit at all (\_\_\_\_\_)

3 CHAIR MOLINA: Okay. Members, everybody got a good  
4 look at this at this time? Okay. Thank you,  
5 Mr. George.

6 In our discussions later we can talk  
7 more about the effects of the low pressure  
8 sodium. At this time there was a request for  
9 one of the people who testified to respond to  
10 questions from one of our Subcommittee  
11 Members.

12 I'd like to ask Dr. -- excuse me, Mr.  
13 Wainscoat, if you could respond to questions  
14 from Dr. Altenberg. You have the mike in  
15 front of you there, Mr. Wainscoat, if you'd  
16 like.

17 COMMITTEE MEMBER ALTENBERG: The question I had is  
18 what, what kind of science that is being done  
19 at Haleakala and at Maunakea, number one,  
20 can't be done now because of the current  
21 level of light pollution; number two, would  
22 be foreclosed from being done in the future  
23 if the growth in light pollution that has  
24 been occurring on Maui, in particular, were  
25 to continue; and if the light pollution were

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1           reduced as per the charge of this  
2           subcommittee, what potential possibilities  
3           would that open up for science on the, on the  
4           mountaintops here?

5    MR. WAINSCOAT: On the, the Big Island from  
6           Maunakea, we have found some problems --  
7           Well, first of all I should backtrack.

8           The island of Hawaii has an island-wide  
9           lighting ordinance that restricts lighting to  
10          street lights and generally outdoor lighting  
11          to low pressure sodium so we have a lot of  
12          protection there. The majority of the light  
13          pollution that we do get on Maunakea is  
14          actually the sodium lights. The effect of  
15          that sodium light pollution is basically that  
16          anything we do takes longer.

17          So we do still see some of the light  
18          pollution from the Big Island but any imaging  
19          or spectroscopy that we do in the red  
20          wavelengths where this light pollution is  
21          present takes longer, so if you build a big  
22          telescope, you sort of degrade the value of  
23          the telescope by, because of the light  
24          pollution.

25          Now, we have found that the, the Big

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1           Island lighting ordinance prohibited the use  
2           of sodium -- not sodium, mercury lamps but it  
3           did not prohibit the sale of mercury lamps.  
4           So it turned out that Costco was selling  
5           mercury lamps and we started recently to see  
6           mercury lines inspectra from the (\_\_\_\_\_)  
7           telescope. And these are the biggest  
8           telescopes in the world, and parts of the  
9           blue spectrum were, were becoming  
10          compromised.

11           And what happens when you get these  
12          emission lines in, for example, mercury lines  
13          or the other metal lines from the metal  
14          halide lamp is that both parts of the  
15          spectrum are effectively destroyed and you  
16          cannot see faint spectral features. And the  
17          faint spectral features are extremely  
18          important in cosmology where you're trying to  
19          determine the distance of a, of a distant  
20          source. It is extremely in (\_\_\_\_) physics  
21          where you're tring to understand the  
22          chemistry of the stars. It's extremely  
23          important in planetary astronomyastronomy  
24          when we're trying to understand the chemistry  
25          of a planet, for example, Jupiter. So it, it

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1                   compromises a very wide spectrum of  
2                   astronomy.

3                   On, on Haleakala, we will start to see  
4                   spectroscopy in the near future from the, the  
5                   new airport 3.6 meter telescope, and I'm not  
6                   really familiar with the level of light  
7                   pollution that you presently have at the top  
8                   of Haleakala. I don't, I don't think that  
9                   there's a lot of spectroscopy happening there  
10                  at the moment, but there is at the Institute  
11                  for Astronomy a very good spectrograph being  
12                  made for the, the airport telescope and that  
13                  will go into operation very shortly. And the  
14                  value of all the astronomy from, from that  
15                  spectrograph and that telescope is, is  
16                  strongly dependent upon keeping the light  
17                  pollution under control on this island.

18                  So in the handout that I gave you, the,  
19                  the spectrums, the sky, the spectrum of the  
20                  sky came from Maunakea, not from Haleakala,  
21                  and I don't have access myself to a spectrum  
22                  of the sky presently from Haleakala to  
23                  evaluate how bad the present light pollution  
24                  is.

25                  I can sort of anecdotally give you a

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1           gut feeling of how bad it is compared to  
2           Maunakea. On Monday I had to spend the whole  
3           day up on Maunakea and everything got very  
4           delayed. I took the last flight back and it  
5           was dark and the flight came very, almost  
6           over Maui. And I was sitting on the right  
7           hand side of the plane, and one of the things  
8           that struck me was that you have people that  
9           -- you have a residential area very much  
10          closer to the summit of Haleakala than, than  
11          if there is anything on, on Maunakea. So  
12          there's a large number of people living in  
13          Kula, so halfway up, up Haleakala right close  
14          to the summit, so you're very vulnerable to  
15          light pollution from that source.

16           The other thing that struck me was that  
17          there is a lot of light from commercial  
18          sources. Street lighting didn't look so bad,  
19          but the commercial lights sources in  
20          especially Kahului and Wailuku especially  
21          were very bad. And it's starting to look a  
22          little bit like Honolulu, which in --  
23          Honolulu has dreadful lighting and I'd like  
24          to see some improvement there. But I was  
25          kind of distressed at the, the amount of

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1           light there, so I think that is something to  
2           be very concerned about.

3    CHAIR MOLINA: Dr. Wainscoat and Dr. Altenberg, at  
4           this time we haven't formally gotten into our  
5           discussion phase, so since Dr. Wainscoat is a  
6           resource person, once we progress into our  
7           meeting then we can have more questions for  
8           him.

9           At this point I'd like to talk about  
10          the meeting schedule, okay? The last meeting  
11          schedule for the subcommittee is Thursday,  
12          March 7th, at ten a.m. and I'd like the  
13          Members to consider any of the following  
14          dates for additional meetings, okay? The  
15          dates I have here are Monday, March 18th in  
16          the morning. Just to let you know, the Chair  
17          has a preference for that date because I, I  
18          do have a Lanai budget meeting hearing on --  
19          that night, so for me, that would work well.

20           Another date to consider is Thursday,  
21          March 21st. And I have a Molokai budget  
22          meeting that night.

23           And then another date is Monday, March  
24          25th to consider, okay?

25           And just to let you know, Tuesday,

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1           March 26th is Prince Kuhio Day and Friday,  
2           March 29th is Good Friday. Both are county  
3           holidays.

4           So at this point I'd like to maybe go  
5           down the line hearing from the Committee  
6           Members as to if they would prefer, which  
7           date they would prefer. Let's start with  
8           Vice Chair Tavares.

9   VICE CHAIR TAVARES: Thank you. Any or all are  
10          fine.

11   CHAIR MOLINA: Thank you. Mr. Maberry?

12   COMMITTEE MEMBER MABERRY: Any or all.

13   CHAIR MOLINA: Any or all. Okay. Mr. Chong?

14   COMMITTEE MEMBER CHONG: Mondays are bad. I have a  
15          standing meeting in Honolulu at one o'clock  
16          in the afternoon that will last for the next  
17          few years.

18   CHAIR MOLINA: So I take it March 18th and March  
19          25th will not work for you then?

20   COMMITTEE MEMBER CHONG: No.

21   CHAIR MOLINA: Okay. So are you good for March  
22          21st?

23   COMMITTEE MEMBER CHONG: Yes.

24   CHAIR MOLINA: Okay. Ms. Bernard?

25   COMMITTEE MEMBER BERNARD: Any or all.

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1 CHAIR MOLINA: Any or all. And Dr. Altenberg?

2 COMMITTEE MEMBER ALTENBERG: Mondays aren't as good  
3 for me either so the 21st would be the  
4 preferable.

5 CHAIR MOLINA: Okay. And the Chair would like to  
6 add at least one or two meetings to the  
7 schedule prior to the April 2nd subcommittee  
8 deadline. So again as we've heard today for  
9 most Members, any or all and we'll try and I  
10 guess we can have Gary work something out too  
11 with all the Members here.

12 Okay. And next, over the past couple  
13 of meetings the subcommittee did deliberate  
14 over eight sections of the draft bill and we  
15 focused most of our attention on one section  
16 of the bill; however, it was difficult to  
17 come to a consensus, so therefore I'd like  
18 for us to refocus our energies by  
19 prioritizing sections of the draft bill that  
20 we feel would have the greatest impact for  
21 improving the lighting conditions in the  
22 County of Maui.

23 And as we look at the -- As we review  
24 our selections for prioritizing the bill, I  
25 recommend that the Members select sections

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1           that will accomplish the following: One,  
2           that it address concerns for reducing impacts  
3           to the environment; two, achieve immediate  
4           results; three, meet our pressing needs, our  
5           most pressing needs; four, reduce the light  
6           glare are trespass; five, conserve energy and  
7           protect wildlife; six, maintain safety and  
8           security; and seven, achieve a consensus  
9           amongst many or all factions.

10           So I'd like for you to take all of that  
11           into consideration, and it's my intention to  
12           review each of the prioritized sections and  
13           find a consensus amongst the Members and  
14           Resource People. And once we do achieve  
15           consensus, then the Subcommittee should  
16           consider recommending amendments to the Maui  
17           County Code to initiate immediate action for  
18           these items. Any comments to that thus far,  
19           Members?

20           Okay. In a memo memory dated January  
21           25th, I requested that the Subcommittee  
22           Members provide a list of prioritized  
23           sections for review at today's meeting. I  
24           would like to start with taking three  
25           prioritized sections from each Member. The

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1           staff will record the recommendations and  
2           once we have received all of the  
3           recommendations, we will commence review of  
4           the sections receiving the most votes from  
5           the Subcommittee Members.

6           So we shall start first -- By the way,  
7           Mr. McCord had to leave for some, I guess  
8           some type of personal issue. He did indicate  
9           he would be back within the next hour so  
10          we'll get his feelings later.

11         We'll start with Vice Chair Tavares, if  
12         you would like to share your top three  
13         priorities with us at this time.

14   VICE CHAIR TAVARES: Well, I don't know what  
15       sections they belong in but my, I think my  
16       top priority would be a recommendation to  
17       look at shielding of existing lights. My  
18       next one would be dealing with out, outside  
19       lighting on, on existing buildings so I guess  
20       that's Section 130, existing light fixtures.

21       And the street lights would be my last one.

22   CHAIR MOLINA: Okay. Thank you. Mr. Maberry?

23       Okay. We'll come back to you, more  
24       time.

25       Okay. Mr. Chong, you have the floor.

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1 COMMITTEE MEMBER CHONG: The three sections that I  
2 would put as the highest priority are Section  
3 .070 lamp standards, .080 luminaire standards  
4 and I think the Specific Uses section. I  
5 think it's .110.

6 CHAIR MOLINA: Okay. Okay. Ms. Bernard?

7 COMMITTEE MEMBER BERNARD: I think I'm on the same  
8 page as you are. Same -- Section 7, outside  
9 lighting standards?

10 CHAIR MOLINA: Section 7, which is the lamp  
11 standards.

12 COMMITTEE MEMBER MABERRY: Part of the problem is  
13 there are a couple versions here that --

14 COMMITTEE MEMBER BERNARD: I need to -- Yeah.

15 CHAIR MOLINA: Sure. You need more time? Okay.

16 COMMITTEE MEMBER BERNARD: Well, if you can just  
17 direct me to the particular documents.

18 CHAIR MOLINA: If you can look at your draft bill  
19 Section 7.070 --

20 COMMITTEE MEMBER BERNARD: .070.

21 CHAIR MOLINA: -- I presume. It's on page 4.

22 COMMITTEE MEMBER BERNARD: Got it. Okay. You can  
23 go on to Dr. Altenberg while I look at it.

24 CHAIR MOLINA: Okay. Dr. Altenberg?

25 COMMITTEE MEMBER ALTENBERG: I think the issue of

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1           the greatest complexity is the existing light  
2           fixtures, Section 130 and exactly how they  
3           should be, how the light pollution from  
4           existing light fixtures should be dealt with.  
5           After that, the issue of lamp standards and  
6           luminaire standards would be the basic top  
7           priorities.

8 CHAIR MOLINA: Okay. Thank you. Mr. Maberry?

9 COMMITTEE MEMBER MABERRY: Yes, sir. Now that I've  
10          got the right document. .070 lamp standards;  
11          .080 luminaire standards and .090 luminaire  
12          mount standards.

13 CHAIR MOLINA: Luminaire mount standards. Okay.

14          And Ms. Bernard?

15 COMMITTEE MEMBER BERNARD: Yes. Just a point of  
16          clarification before I give my priorities.  
17          Will we focus only on these and --

18 CHAIR MOLINA: Well, yeah.

19 COMMITTEE MEMBER BERNARD: -- what the (\_\_\_\_\_)

20 CHAIR MOLINA: As I stated earlier, this is a very  
21          broad and comprehensive bill and I think it's  
22          real important. I want to get feedback from  
23          each of you to tell me what are your three  
24          most important priorities. Something that is  
25          realistic that we can address now, for now,

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1           and then maybe later on down the road if this  
2           subcommittee should ever be considered for  
3           being resurrected to look at other issues.

4           But I think at this point we should  
5           take it, you know, piece by piece because  
6           there's a lot of -- as we found in our prior  
7           meetings, that there's a lot of side issues  
8           that can get rather broad and comprehensive,  
9           so it's my intention to just focus on the top  
10          three areas of concern for the time being and  
11          that way we can somewhat narrow our focus and  
12          we can proceed from there.

13        COMMITTEE MEMBER BERNARD: Okay. It kind of feels  
14           like .080 and .090 go together, the luminaire  
15           standards and the mount standards. It's hard  
16           to separate the two. Certainly lamp  
17           standards is, is the number one priority for  
18           me and then luminaire standards, but I don't  
19           want us to lose the general exemptions, .050.

20        CHAIR MOLINA: Okay.

21        COMMITTEE MEMBER BERNARD: So I'm going to put that  
22           one as my third.

23        CHAIR MOLINA: Okay. Gary, did you get all of  
24           that? So we can decide which areas. It  
25           seems like we have a lot of -- One, two --

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1                   For me, it's shielding and existing  
2                   light fixtures and street lamps. Those are  
3                   my top three.

4    MR. SALDANA: (\_\_\_\_\_)

5    CHAIR MOLINA: Do you need a brief recess, Gary?

6    MR. SALDANA: If you can look at the chart on the  
7                   wall, you can pretty much see which ones  
8                   have, have the biggest priorities in terms of  
9                   the, in terms of the Members.

10                  It appears .070 has, has the majority  
11                  of four votes and .080 has four votes as  
12                  well. Luminaire mounts has one vote. Street  
13                  lighting has two votes. And then specific  
14                  uses has one and then existing fixtures has  
15                  three with general exemptions one.

16                  So based on, based on those, it appears  
17                  that .070, .080 and .0 -- and .130 are the  
18                  top three priorities. And then following  
19                  that, it would appear that the Committee  
20                  should jump into the street, street lighting  
21                  and then address both the general exemptions  
22                  and the specific uses following that.

23    CHAIR MOLINA: Okay. So for the record, .070, .080  
24                  and .130 have received the most requests,  
25                  Gary, is that --

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1 MR. SALDANA: That's correct.

2 CHAIR MOLINA: Okay. Members, so maybe what we can  
3 do is focus on those top three and maybe  
4 later down the road we can look at the others  
5 that were mentioned as concerns.

6 Okay. Okay. For the record, people in  
7 attendance: Resource personnel, we have from  
8 the Public Works Department, Howard Hanzawa,  
9 Greg Nakao, Cary Yamashita; and from the  
10 Department of Planning, Joseph Alueta -- Oh,  
11 I'm sorry, Lloyd Lee?

12 MR. LEE: Yeah.

13 CHAIR MOLINA: Okay. Sorry. We have Lloyd Lee  
14 from Public Works; and from the Parks  
15 Department, Pat Matsui; and from the Police  
16 Department, Captain Hudson; and County Energy  
17 Specialist Kal Kobayashi.

18 And the Chair also invited additional  
19 resource personnel from the State DOT, Paul  
20 Chun; OSHA was invited but was unable to  
21 attend, attend today; we have Dr. Wainscoat  
22 from the University of Hawaii; Lynn Woods  
23 from the Chamber of Commerce. I don't see  
24 her here but she was invited. Carol Vensil  
25 is here. Carol, if you want to come up and

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1           take a seat in front, we're inviting all the  
2           resource people up to the front lines. And  
3           Calvin Bank from Safe Communities. I don't  
4           know if he's here. Randy Nakama from Maui  
5           Electric is here; Randy Phelps, representative  
6           for the commercial lighting industry; Brian  
7           Ige of Dawling & Company from the developer's  
8           perspective and Brian is here; and then we  
9           have Bill George and Rob Horning who will  
10          represent the hotels and resorts.

11           So at this point we will focus there on  
12          these top three items. Let's start first  
13          with lamp standards. Any comments or  
14          questions at this point, Subcommittee  
15          Members, on which specific areas shall we  
16          continue this discussion? I know we had a  
17          lot on this at our last meeting.

18           Mr. Maberry? Nothing.

19           Okay, Mr. Chong?

20    COMMITTEE MEMBER CHONG: I don't know -- I think  
21          Gary had sent out. I made some --

22    CHAIR MOLINA: Right, your recommendations.

23    COMMITTEE MEMBER CHONG: -- recommendations.

24    CHAIR MOLINA: Okay. Go ahead. I'll yield the  
25          mike to you at this time.

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1 MR. SALDANA: I'll go ahead and put them on the  
2 screen so we can see them.

3 CHAIR MOLINA: Okay. Do you want to turn the light  
4 down on this, Gary, so everybody can see? Is  
5 that okay for everybody, can you see the wall  
6 without the light pollution in here?

7 ?: Careful.

8 CHAIR MOLINA: Sorry. Turn that light on, Phil.

9 Okay. That's good.

10 Okay. That's fine. Okay. Proceed,  
11 Rick.

12 COMMITTEE MEMBER CHONG: Basically we, I wrote,  
13 rewrote some of the paragraphs and this is  
14 just suggestions, this is to throw it out on  
15 the table for people to comment on.

16 Low pressure sodium vapor lamps, LPS,  
17 and high pressure sodium vapor lamps shall be  
18 only allowed lamps with 3,000 or greater  
19 lumens. And I think the document says 1800  
20 in the current rough draft so I've increased  
21 that amount to give us a little bit more  
22 leeway in, in lower wattage lamps with the  
23 following exceptions:

24 Areas where color rendition is needed  
25 to preserve the effectiveness of the

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1           activity, LPS or HPS lamps are not required.

2           And in specifics, outdoor sales or

3           dining areas during business hours;

4           Industrial assembly or repair areas. I

5           guess even the word assembly could mean

6           congregation, so just to clarify, I think

7           that's what the intent of the rough draft

8           was;

9           Recreational sports facilities and

10          other similar applications no later than

11          eleven p.m. similar to what the Big Island

12          ordinance allows at this point;

13          Advertising and other signs.

14          Additional exemptions, you know, there

15          is a typo there. The required use of low

16          pressure sodium and high pressure sodium

17          lamps may be granted, et cetera, et cetera.

18          And it's just inserting high pressure sodium

19          as an optional lamp versus just low pressure

20          sodium, and that's the low pressure sodium

21          topic.

22          I went on to talk about mercury vapor

23          luminaires are expressly prohibited. The

24          installation, safe offering, offering for

25          sale, lease or purchase of any new mercury

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1           vapor luminaire is prohibited. The sale of  
2           replacement mercury vapor lamps is permitted  
3           for use in existing mercury vapor luminaires.

4           In other words, I addressed my concern  
5           at the last meeting forcing homeowners and  
6           small shops to have to buy new luminaires  
7           when the luminaire that they're currently  
8           using is perfectly in good condition.

9           I like the intent of the code, it's  
10          just to give the small guys an option until  
11          the luminaire dies on them. We're not  
12          forcing them to spend money, and I think  
13          that's just being sensitive to the public.

14          And then for roadways, LPH or HPS  
15          luminaries is permitted. Fully shield or  
16          full cut off -- Sorry. Mike here was worried  
17          about me not liking or allowing non-fully cut  
18          off but I have no problems with full cut off  
19          luminaires in the roadway. Those are just my  
20          suggestions.

21    CHAIR MOLINA: Okay. Thank you. And that was for  
22          Section .070. Mr. Maberry?

23    COMMITTEE MEMBER MABERRY: Yes, sir. Could you  
24          please provide examples of uses for LPS or  
25          HPS under 3,000 lumens?

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1 COMMITTEE MEMBER CHONG: You mean other types of  
2 lamps other than LPS?

3 COMMITTEE MEMBER MABERRY: What would be, what  
4 would they be used for?

5 COMMITTEE MEMBER CHONG: Lots of things: Pathway  
6 lighting, landscape lighting, the last list  
7 is pretty, pretty extensive.

8 COMMITTEE MEMBER MABERRY: Okay. So what would  
9 be --

10 COMMITTEE MEMBER CHONG: And 1800 watts, 1800  
11 lumens is pretty limited in our, in our use.

12 For instance, for us to use a 100 watt  
13 par incandescent lamp to light a tree, the  
14 comparable lamp in metal halide, which is  
15 what we actually use now because it's more  
16 efficacious and puts out the same color  
17 rendering -- has the, has the same type of  
18 color rendering as an incandescent source is  
19 a 39 watt metal halide lamp. And those lamps  
20 all range in the 3,000 lumens per lamp  
21 sector, and those are things that we like to  
22 use as designers that work for us in the  
23 field.

24 1800 would limit us to very tiny lamps,  
25 and to light a large canopy tree would be,

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1           for example, very difficult and we would need  
2           a number of luminaires to, to do something  
3           very effective.

4    CHAIR MOLINA: Okay. Mr. Maberry?

5    COMMITTEE MEMBER MABERRY: Additional question  
6           regarding fee. How would you, how would you  
7           feel or would this be an appropriate spot to  
8           put some height restrictions on, on the  
9           luminaires?

10   COMMITTEE MEMBER CHONG: I have no problem with  
11           height restrictions. I believe the code  
12           talks about a 20 foot height restriction.

13   COMMITTEE MEMBER MABERRY: The existing, the  
14           existing code for Maui County has a 20 foot  
15           height restriction.

16   COMMITTEE MEMBER CHONG: I have no problem with  
17           that.

18   COMMITTEE MEMBER MABERRY: Okay. And could you,  
19           could you explain why?

20   COMMITTEE MEMBER CHONG: We can make it work. I  
21           mean it costs -- As I pointed out, limiting  
22           pole heights means more poles to light  
23           parking lots or roadways or whatever you're  
24           using the 20 foot pole to meet safety  
25           standards, OSHA standards or IES standards,

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1           highway standards. The taller the pole, the  
2           farther apart I can spread them out. It's  
3           just pure dollars up front.

4           But if that's what, if that's a  
5           compromised position and that's what the code  
6           is going to say, we could make it work; it's  
7           just that we have to let our clients know  
8           that because of the county code, this is the  
9           ramifications. It's going to cost you a few  
10          more dollars to light this parking lot. They  
11          have to understand that.

12         COMMITTEE MEMBER MABERRY: Is it as easy to --

13         CHAIR MOLINA: Excuse me, Mike.

14         COMMITTEE MEMBER MABERRY: Oh, I apologize.

15         CHAIR MOLINA: No, no, maybe later in our  
16           discussion or if you want to make your  
17           concerns in writing to Rick, I think we can  
18           do that. At this point I would like to hear  
19           the recommendations from the Members.

20           Gary, we did get some more -- one of  
21           the other members did send in their  
22           recommendations?

23         MR. SALDANA: Yes, I do have another, another set  
24           of comments on the section, I believe if  
25           you'd just bear with me one second.

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1 CHAIR MOLINA: By the way, if any of the resource  
2 personnel you have any comments or concerns,  
3 please feel free to let me know.

4 MR. SALDANA: Okay. We have the comments on the  
5 screen from Mr. George.

6 CHAIR MOLINA: Okay. We have Mr. --

7 MR. SALDANA: .070.

8 CHAIR MOLINA: Mr. George, okay, who is one of our  
9 your personnel sent in -- By the way, our  
10 Analyst, Gary Saldana, did send out e-mails  
11 to members and resource personnel for their  
12 recommendations and we got a response back  
13 from Mr. Chong and Mr. George.

14 Mr. George, if you'd like to go ahead  
15 and share with us your thoughts.

16 MR. GEORGE: Yes. On that first one there,  
17 .070.1.a, it says outdoor sales or eighting  
18 areas during business hours. My question was  
19 does this include the property of the  
20 business, and if so, does it include the  
21 whole resort which has a liquor license for  
22 the whole property? So this would be almost  
23 exempting the whole resort from it if you've  
24 got a liquor license that does the whole  
25 property, so we want to clarify this.

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1 CHAIR MOLINA: Okay. Is that it? Do you have  
2 anything else on Section --

3 MR. GEORGE: No.

4 CHAIR MOLINA: -- .070?

5 MR. GEORGE: I just wonder if there's any comments  
6 or questions about it.

7 CHAIR MOLINA: Okay. Members, any questions to  
8 that? Ms. Bernard?

9 COMMITTEE MEMBER BERNARD: I'm a little confused.  
10 So now this comment addresses comments and  
11 are we getting into discussion now about Mr.  
12 Chong's comments?

13 CHAIR MOLINA: No, no, we have Mr. George -- We  
14 already had discussion --

15 COMMITTEE MEMBER BERNARD: But his comment, but his  
16 comment is based upon -- Isn't it based upon  
17 Mr. Chong's clarification?

18 CHAIR MOLINA: Well, at this point what I'd like to  
19 do is just everybody share their  
20 recommendations and then later on we can get  
21 into discussions, but if you have questions  
22 for Mr. George at this time on what he just  
23 said --

24 COMMITTEE MEMBER BERNARD: Okay.

25 CHAIR MOLINA: -- please ask them now.

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1       MR. GEORGE: So I'll continue. On point c,  
2               recreational facilities and other similar  
3               applications, my question was does this  
4               include all the property of the business,  
5               again if so does it include hotels and  
6               resorts? It seems like it would.

7               I also think we should add a point e  
8               and the statement would be something similar  
9               to where life, safety, risk management and  
10               security are concerns, so it would give us a  
11               little more leeway in safety and the police  
12               department or security departments to get  
13               involved.

14               Then in the Section .070.2.B, delete  
15               the lamps, so that's similar to what Rick was  
16               saying in, in being able to sell the lamp but  
17               not the fixture to help the people that  
18               already have existing fixtures until they,  
19               it's totally caput.

20               On the .2-.C, rewrite the whole section  
21               to use foot candles, foot candle  
22               specifications delivered to the road surface  
23               as specified by existing code.

24               And going into Section .080, we already  
25               started that? Oh, we haven't started that.

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1           That's existing for .070.

2    CHAIR MOLINA: Okay. Any questions or comments for  
3           Mr. George on his recommendations? Members  
4           or any other resource personnel?

5           Okay. Seeing none.

6           Okay. Shall we move on to .80, .080?

7           Okay. Maybe Mr. Chong, I guess you can go  
8           ahead and give your recommendations. Did you  
9           have some on .080?

10   COMMITTEE MEMBER CHONG: Yes, I did.

11   CHAIR MOLINA: Go ahead.

12   COMMITTEE MEMBER CHONG: Okay. We wanted some, we  
13       recommend or suggest some, again, revisions  
14       to the following paragraphs:

15           Paragraph A, fully shielded luminaires  
16       with the 15 et cetera, et cetera. I guess I  
17       mean to you get back to that --

18   CHAIR MOLINA: Okay. Members, on page 5. .080, at  
19       the first paragraph in A.

20   COMMITTEE MEMBER CHONG: Actually skipping that  
21       part, I'm going to paragraph 1. Again, going  
22       with that same lumen output of 3000, we  
23       modified these paragraphs to include the  
24       same, luminaires that have a maximum output  
25       of 3000 lumens per luminaire regardless of

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1           the number of lamps may be left unshielded.

2           Again, this is addressing our concerns  
3           about being able to do some aesthetic  
4           lighting in applications of landscape  
5           lighting or sculpture lighting or something  
6           like that. Again, the lamps of choice for  
7           sizes of trees or sculptures or things that  
8           we use would be easier to us to work with a  
9           lumen output of 3,000, up to 3,000.

10          Luminaires that have a maximum output  
11          of 10,000 lumens per luminaire regardless of  
12          the number of lamps may be partially shielded  
13          provided the bare lamp is not visible.

14          This would address design issues when  
15          you, say, want to use a historical light  
16          fixture that you can't build an 8 point  
17          fixture that is fully shielded but you can  
18          build it so that you don't see the bare lamp.

19          And I know Mike Maberry showed me some  
20          pictures of some light fixtures that, that  
21          sort of address that issue, but again just  
22          increasing the lumen output. To do some area  
23          lighting, you need to have some, some lumen  
24          output given the height of the pole,  
25          otherwise the poles end up being real short

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1           to get the light effectively to the ground.

2           Motion activated lighting may be  
3           unshielded provided it is aimed in such a  
4           manner as to prevent lighting into properties  
5           of others or into public right of way, and  
6           provided the light is set to go on only when  
7           activated and to go off within 30 minutes  
8           after the activity has ceased. Most motion  
9           sensors have a 30 minute time limit on them  
10          off the shelf.

11          All flood or spot luminaires with a  
12          lamp or lamps rated at 3000 lumens or less  
13          may be used without restriction to lamp  
14          luminaire distribution or mounting. Again,  
15          the difference in here is just increase the  
16          lumen output of what's allowed in the current  
17          rough draft.

18          Luminaires that have an output of at  
19          least 1000 luminaires per luminaire shall  
20          have additional shielding or shall be aimed  
21          such that no light shines directly on the  
22          ocean to highest tide, et cetera, and that's  
23          just playing with the lumen amount again.

24          And that's all I have for that section.

25          CHAIR MOLINA: Okay.

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1 COMMITTEE MEMBER MABERRY: Point of --

2 CHAIR MOLINA: Mr. Maberry?

3 COMMITTEE MEMBER MABERRY: -- information, sir.

4 Could we ask Maui Electric what the lumen  
5 rating is for street lights that are  
6 currently the high pressure sodium vapor  
7 street lights currently on Maui highways?

8 CHAIR MOLINA: Okay. Mr. Nakama?

9 Can you speak in the mike please?

10 Thank you.

11 MR. NAKAMA: I don't have that information right  
12 now but I can get that for you at our next  
13 meeting.

14 COMMITTEE MEMBER CHONG: I have a lamp catalogue  
15 right here if --

16 CHAIR MOLINA: Pardon me, Mr. Chong?

17 COMMITTEE MEMBER CHONG: I have a lamp catalogue  
18 that I brought along just to give you some  
19 rough lumen output and values.

20 For a 100 watt high pressure sodium  
21 lamp, the initial lumens is roughly 7,000  
22 lumens. For a 150 watt high pressure sodium  
23 lamp, the --

24 ?: (\_\_\_\_\_)

25 COMMITTEE MEMBER CHONG: You guys, you want to

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1           clarify what Maui County's using? 100 watts,  
2           150 watts?

3    MR. NAKAMA: It's 100 and 150.

4    COMMITTEE MEMBER CHONG: Okay. Sorry. 100 watt  
5           high pressure sodium lamp, approximately  
6           7,000 lumens depending on the type of lamp.  
7           There's different, different types of 100  
8           watt lamps. 150 watt lamp is roughly -- It's  
9           either 11,000 or 12,000 lumens.

10   ?: Thank you, Mr. Chair.

11   CHAIR MOLINA: Okay. Thank you. Ms. Bernard?

12   COMMITTEE MEMBER BERNARD: Point of clarification.

13   CHAIR MOLINA: Go ahead.

14   COMMITTEE MEMBER BERNARD: Is your intention to go  
15       over these with discussion by the Committee  
16       Members point by point when he's complete?

17       I'm kind --

18   CHAIR MOLINA: Right. Yeah.

19   COMMITTEE MEMBER BERNARD: -- of still --

20   CHAIR MOLINA: Yeah. We're just right now in the  
21       phase of --

22   COMMITTEE MEMBER BERNARD: Just asking questions?

23   CHAIR MOLINA: Yeah. No. That's --

24   COMMITTEE MEMBER BERNARD: But if we have our --  
25       You know, I have specific concerns regarding

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1           sea turtle nesting.

2 CHAIR MOLINA: Sure.

3 COMMITTEE MEMBER BERNARD: And so this, this would  
4           be a for discussion.

5 CHAIR MOLINA: Okay. And, and we'll definitely --

6 COMMITTEE MEMBER BERNARD: Okay.

7 CHAIR MOLINA: -- address those concerns later so I  
8           just want to get through the recommendations  
9           that were sent to us by Mr. George and Mr.  
10          Chong, okay?

11           Mr. George, your comments on Section  
12          .080?

13 MR. GEORGE: I'd like to apologize. I did miss one  
14           thing that's kind of big in the last section.  
15           If you look at point B, let's see what it is,  
16           it talks about what size lamping, the C for  
17           roadways. The existing draft says, "For  
18           roadways within the rural or agricultural  
19           areas, the maximum allow -- watt allowable  
20           wattage shall be 50W LPS," or so that  
21           section.

22           When I purchased this fixture, there is  
23           no 50 watt LPS made so you're automatically  
24           either going to go to a 35 or 55 so that  
25           would be something we want to talk about.

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1                   As an example, there is no 75 watt or  
2                   110 watts made so these numbers aren't  
3                   correlating to existing light bulbs that are  
4                   made, so you're automatically limiting --

5                   As an example, for the 50 watt LPS that  
6                   we would set as an internal road  
7                   intersection, the, the next bulb that's made  
8                   closest to that is 35 watt, so just be aware  
9                   of that if you want to change that because  
10                  right now they are not producing that bulb at  
11                  all or any of these.

12                 COMMITTEE MEMBER BERNARD: Which code is that?

13                 What number please?

14                 MR. GEORGE: That is in the .07 -- Let's see.

15                 ?: C.

16                 MR. GEORGE: C and D.

17                 CHAIR MOLINA: Page 5. Okay. Mr. George, do you  
18                 want to proceed with your comments --

19                 MR. GEORGE: Yes.

20                 CHAIR MOLINA: -- on .080?

21                 MR. GEORGE: Yes. In the .A.1 section, it's kind  
22                 of the same question, where does this 260  
23                 lumens per fixture number come from? Will  
24                 this light be effective in risk management  
25                 situations or walkways?

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1                   So I would recommend that we go to put  
2                   candles delivered to the surface. It's a lot  
3                   more easable to test, it's a lot easier to  
4                   understand, and in the safety risk management  
5                   manuals it all goes by foot candles. So it  
6                   would something to work at. What do you have  
7                   at the surface of walkway?

8                   Also in that area in that same section,  
9                   luminous tubes, which are very compact  
10                  fluorescents, would they be allowed? So that  
11                  would be a question for us to go over. It  
12                  specifically doesn't address that situation.

13                  In A.2, where does the 1000 lumen per  
14                  fixture number come from, so that would be  
15                  another question is where do these, where do  
16                  these numbers come from? It would be better  
17                  to have a foot candles rating.

18                  On A.3, add motion in front of sensor.  
19                  We just had sensor in the draft. It would be  
20                  better to put motion sensor and change the  
21                  direct glare quote to direct illumination  
22                  and/or glare because direct glare is kind of  
23                  redundant.

24                  And then let's see, also in that same  
25                  section, businesses often light public right

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1           of way areas where risk management, life  
2           safety and/or security is of concern adjacent  
3           to the property. I think the liability  
4           question in this section would, would be  
5           something we have to address.

6           In 80.B, change the quotation glare  
7           perceptible just to glare. Perceptible is a  
8           very subjective word, so if we just say  
9           glare, which with your definitions in the  
10          glares, it should be adequate.

11          In point C, I had security concerns  
12          should be addressed.

13          Point D, who -- Again who will be  
14          responsible for risk management, life safety  
15          and security concerns from the high tide to  
16          the ocean area. How do you prove where the  
17          crime occurred in that kind of situation?

18          So that was about the end of that point  
19          80 in the next -- Yeah. So the next question  
20          goes on to priorities. Thank you.

21    CHAIR MOLINA: Okay. Thank you. Mr. Chong, you  
22          had additional -- Oh, first of all, any  
23          questions for Mr. George or comments on  
24          section .080? Okay. Seeing -- Dr.  
25          Altenberg?

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1 COMMITTEE MEMBER ALTENBERG: In regards to his  
2 question where do these lumen numbers come  
3 from, some of these were borrowed from the  
4 current outdoor lighting standards of  
5 Kennebunk, Maine and which are also  
6 recommended by the International Dark Sky  
7 Association.

8 CHAIR MOLINA: Okay. Any other questions or  
9 comments for Mr. George?

10 Okay. Mr. Chong, did you have  
11 additional recommendations?

12 MR. SALDANA: I think there is a question there.

13 CHAIR MOLINA: I'm sorry. Go ahead. Mr. Nakao?

14 MR. NAKAO: I thought we had a discussion that we  
15 were trying to stay away from foot candles  
16 earlier that, so that I don't have to go out  
17 there at night with a light meter to measure  
18 these reading.

19 CHAIR MOLINA: Okay.

20 COMMITTEE MEMBER MABERRY: That's our understanding  
21 as well.

22 COMMITTEE MEMBER CHONG: Yeah. I, I believe -- You  
23 know, my belief is that the standard, this  
24 ordinance should not be setting foot candles  
25 levels. That should be left to other means

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1           like State highway standards, Federal, I mean  
2           Federal highway standards, Illuminating  
3           Engineering Society who are the recognized  
4           people in these areas, OSHA. If we start  
5           setting our own levels, then we open  
6           ourselves up to a lot of problems. That  
7           sets -- You know, yeah, you're right, we, we  
8           kind of talked about that.

9    CHAIR MOLINA: At our prior meeting I believe it  
10       was. Okay. Any other comments? Mr. Lee?

11    MR. LEE: Lloyd Lee from Department of Engineering.  
12       I understand what Mr. Chong is saying as far  
13       as setting standards in, in direct conflict  
14       with Federal and State standards, which we  
15       have adopted for street lights for our  
16       roadways.

17       However, if you look at the ordinance  
18       you're proposing, you set wattages as far as  
19       for street lights, which is actually setting  
20       a standard that is in direct conflict with  
21       national standards.

22    COMMITTEE MEMBER BERNARD: Not necessarily. If you  
23       set the wattage, you have to work with that  
24       wattage lamp and the luminaire you're going  
25       to house it in and the height of the pole

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1           that you're going to use, whether it's 20 or  
2           15 feet, then you need to run your lighting  
3           calculation to see how often you need to  
4           space the luminaire poles along the roadway  
5           to meet the Federal and State highway  
6           standards.

7    MR. LEE: That's what I'm saying. So basically  
8           let's say we have a minimum -- maximum height  
9           of 20 feet. Based on 20 feet based on 50 LPS  
10          light, right now our standard in urban areas  
11          is 250 feet spacing. By using the new  
12          standard that you're proposing, we might out  
13          100 foot spacing.

14    COMMITTEE MEMBER CHONG: That's right. And --

15    MR. LEE: So we're going to have more street lights  
16          on the road and more cost to the County to  
17          install those.

18    COMMITTEE MEMBER CHONG: That's right. That is --

19    MR. LEE: Is that what you're proposing?

20    COMMITTEE MEMBER CHONG: No, that's what the  
21          ordinance will force you to do.

22    MR. LEE: No, I understand that but --

23    COMMITTEE MEMBER CHONG: Yeah.

24    MR. LEE: -- I'm saying does this Committee realize  
25          that by lowering the standard -- not lowering

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1           the standard but changing the standards  
2           you're requiring the County in this case for  
3           street lighting for roadways to put more  
4           street lights than normally we have now that  
5           would be the end result.

6   COMMITTEE MEMBER CHONG: I realize that. That's  
7           why you're sitting here to make comments, I  
8           believe.

9   MR. LEE: No, that's why I'm saying. I mean this  
10          is what -- My understanding of this committee  
11          is to try to mitigate additional street  
12          lights but actually this committee is going  
13          in the direction where we're going to end up  
14          putting more street lights based on the  
15          height standards and based on the wattage  
16          that you guys are specifying.

17   COMMITTEE MEMBER CHONG: Potentially, yes.

18   MR. LEE: Okay.

19   COMMITTEE MEMBER CHONG: If we go back to Section  
20          .070 when I mentioned that for roadways LPS  
21          or HPS luminaires is permitted fully  
22          shielded, fully shielded and I forgot about  
23          15 degree cut off.

24           Basically the way the ordinance is  
25          written, it currently states specific

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1           wattages for specific types of roadways,  
2           rural and, and urban.

3    MR. LEE: Right.

4    COMMITTEE MEMBER CHONG: My suggestion is just wipe  
5           out any wattage recommendations and just --

6    MR. LEE: Oh, okay.

7    COMMITTEE MEMBER CHONG: -- make the statement  
8           about if it's LPS, if it's LPS, or it's LPS  
9           and HPS if that's what we end up with, and  
10          leave the wattage up to the engineer that you  
11          hire to design your roadway lighting.

12    MR. LEE: Okay. No, we have accepted standard as  
13          far as roadway lighting already, the one  
14          thing is this proposal conflicts what we  
15          already have in existence.

16    COMMITTEE MEMBER CHONG: That's why I'm making this  
17          recommendation --

18    MR. LEE: Okay. That's fine.

19    COMMITTEE MEMBER CHONG: -- that we take out the  
20          wattage.

21    MR. LEE: That's fine.

22    CHAIR MOLINA: Okay. Thank you, gentlemen. Dr.  
23          Altenberg?

24    COMMITTEE MEMBER ALTENBERG: Yeah. Another comment  
25          to -- on Bill George's raising the thing

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1           about foot candles.

2           The reason that foot candles are not  
3           dealt with here is because the concern is not  
4           as to how the light is being used and, and  
5           what's happening on the ground, the concern  
6           is that regardless of whatever the lighting  
7           engineer's intent, if it has a certain  
8           brightness that there be a certain level of  
9           shielding. So we're -- it's not a concern  
10          about basically illumination standards on the  
11          ground, but for what is going up into the,  
12          into the air or into other people's property.  
13          And so that is -- you don't need to measure  
14          how bright it is on the ground, you just need  
15          to know what the hardware lumen rating is.

16           So presumably, as Rick Chong was  
17          saying, the engineer or the designer will  
18          arrange the lights to get whatever foot  
19          candle levels they want, but the issue is if  
20          it's a certain brightness of a light, then it  
21          has to have a certain level of shielding.

22 CHAIR MOLINA: Okay. Thank you. Mr. George?

23 MR. GEORGE: The main reason why I brought up foot  
24          candles was because the concern is simply for  
25          existing properties, existing real estate

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1 properties where a fixture -- It's the same  
2 thing we're talking about the highway poles,  
3 the street light poles.

4 You're going to have to go back. It's  
5 not a new engineer design, it's having to go  
6 back and double up or triple up lights in  
7 between the existing lights to get the same  
8 amount of, of safety or lighting on that  
9 walkway, so that was the concern that I put  
10 here and left it as a question. There's got  
11 to be some kind of way --

12 If we're not going to grandfather this  
13 and you're going to have everybody do this  
14 within five years, you're going to have a lot  
15 of people scrambling to, to try and fix these  
16 situations, so I just wanted that, you know,  
17 the committee to be aware of that, that not  
18 only is it going to be doubling up poles, you  
19 might be tripling up poles and putting in  
20 three light fixtures where there used to be  
21 one, so just be aware of that.

22 CHAIR MOLINA: Okay. Members, any comments or  
23 questions?

24 Okay. Do we have additional  
25 recommendations from Mr. Chong or Mr. George?

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1           Dr. Altenberg, before we proceed, go ahead.

2   COMMITTEE MEMBER ALTENBERG: Let's see. The issue  
3           of pole height has come up here. Would this  
4           be an appropriate time to ask a question?

5           How did the existing MC-15 code, how did they  
6           come up with 20 feet as a limit on the street  
7           light pole height?

8   CHAIR MOLINA: Okay. I think that would be --

9   COMMITTEE MEMBER ALTENBERG: What's the basis for  
10           that?

11   CHAIR MOLINA: Maybe that would be a question for  
12           Mr. Lee from Public Works. Dr. Altenberg, do  
13           you want to repeat your question?

14   COMMITTEE MEMBER ALTENBERG: Yes. This is in  
15           regards to current code section MC-15 where  
16           the 20 foot is the limit on street light  
17           poles. What was the basis for putting that  
18           into that rule?

19   MR. LEE: Well, right now actually there was a  
20           subdivision standards, (\_\_\_\_\_) standards  
21           committee that was formulated to look at the  
22           subdivision standards, and street lights was  
23           an issue. So they came back and the previous  
24           standard was 30 foot poles and the spacing on  
25           the 30 foot poles was based again, based on

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1           urban and rural areas.

2           What they found out basically is that  
3           if we would lower the height as far as the  
4           pole is concerned, you would eliminate or  
5           mitigate some of the side glare to the  
6           properties as well as to the environment. So  
7           they recommended, the Street Light Committee  
8           -- not the Street Light, the Urban Standards  
9           Committee for Subdivisions recommend that we  
10          lower the fixture height as far as 20 feet.

11          To address that side glare issue.

12          And also the Street Light Committee --  
13          not Street Light, Urban Standards Committee,  
14          they also recommended that we use recess  
15          lighting exclusively on our street lights and  
16          Maui Electric has been conforming to that.

17          As far as any new street lights installed  
18          within the County of Maui, we do have recess  
19          lights lens where there is an omission of  
20          side glare.

21    COMMITTEE MEMBER ALTENBERG: By recess, do you mean  
22          full cut off, fully shielded?

23    MR. LEE: It's fully shielded. There is no side,  
24          per se, side light glare to the operating  
25          atmosphere as well as the community. In

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1           other words, it's kind of channelled  
2           downwards.

3 COMMITTEE MEMBER CHONG: I believe that's what it  
4           is he's talking about.

5 COMMITTEE MEMBER ALTENBERG: Yeah.

6 COMMITTEE MEMBER CHONG: Full cut off.

7 COMMITTEE MEMBER ALTENBERG: The --

8 MR. LEE: Full cut off, yeah.

9 COMMITTEE MEMBER ALTENBERG: The lights that were  
10          installed in the Piilani II Subdivision and  
11          also on Makena Alanui were installed after  
12          the effective date of the current MC 15 code  
13          and yet those are not shielded. They're not  
14          complying with the current code  
15          recommendation -- requirements.

16 MR. LEE: It's my understanding that Makena Alanui  
17          roadways street lights, the one installed  
18          does meet that standard, and I think Randy is  
19          here. He can confirm that.

20           When you say fully shield, it's, it's a  
21          recess so there are no shields per se,  
22          external shields on the lamp fixture itself,  
23          on the luminaire.

24 COMMITTEE MEMBER ALTENBERG: That does not meet  
25          the, the requirement that no light go above

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1           the horizontal plane. There is quite a  
2           substantial up light from those street  
3           lights, so --

4    MR. LEE: Well, I'll double check that but  
5           basically our standards are supposed to have  
6           been enforced for that type of street light,  
7           so if Maui Electric, you concern about the  
8           horizontal upward glare is valid, then those  
9           naturally have to be changed.

10   COMMITTEE MEMBER ALTENBERG: A question for the --  
11           anybody from Wailea. The anodized street  
12           lights that are installed there, what is the  
13           height on those?

14   CHAIR MOLINA: Maybe would that be Maui -- Are you  
15           talking about the light fixtures in the  
16           Wailea area, I guess?

17   COMMITTEE MEMBER ALTENBERG: Yeah, the anodized  
18           street lights in Wailea, those appear to be  
19           lower than the aluminum poles that are  
20           elsewhere but I was wondering what the --  
21           would they be conforming to an example of the  
22           20 foot limit?

23   MR. LEE: No, they do not. Those street lights was  
24           on a private road facility that Wailea  
25           Development Company used their own standards.

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1           However, since then the County, they  
2           dedicated the road to the County so now we  
3           own those. It does not conform to current  
4           standards.

5    COMMITTEE MEMBER ALTENBERG: Do you know how high  
6           they are, just for reference?

7    MR. LEE: I don't know.

8    CHAIR MOLINA: We could get that information later  
9           or do you have that available, Mr. Lee? You  
10          can get that --

11    MR. LEE: No, I don't have that available.

12    CHAIR MOLINA: Okay. We can get that for you at  
13          our next meeting.

14           At this time I'd like to ask for  
15          comments from the Corp Counsel on the  
16          recommendations you've heard so far, thus far  
17          on .070? Any comments from you?

18    MR. GARNEAU: The only comment I have thus far is I  
19          think with regards to the concerns with any  
20          liability, I -- if there are State and high,  
21          Federal standards, we need to make sure that  
22          our ordinance doesn't conflict with those in  
23          such a way that it would subject the County  
24          to liability down the road.

25           And one of the things I was -- that

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1           occurred to me that if, for example, if the  
2           ordinance is so restrictive that it's  
3           difficult to meet State and highway standards  
4           and we go ahead with it anyway and someone  
5           gets hurt because of the lighting, then we're  
6           going to invite lawsuits because people are  
7           then going to come to the County and say,  
8           "Well, wait a minute. You put in this  
9           standard. It doesn't meet the State and  
10          Federal standards and therefore you're liable  
11          for any kind of safety concerns."

12           So I'm concerned that whatever we  
13          decide in this particular section, that it  
14          does allow people to conform the -- to State  
15          and Federal law because otherwise we'll be  
16          looking for liability down the road.

17    CHAIR MOLINA: Any comments or questions? Ms.  
18           Bernard?

19    COMMITTEE MEMBER BERNARD: Along those lines, I  
20          guess I'd just like to bring to everyone's  
21          attention that, that along the same lines the  
22          County or whomever is responsible for  
23          lighting could be liable under the Endangered  
24          Species Act for the taking of sea turtles if  
25          it prevents the turtles from nesting and from

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1           using their habitat. Discussions with the  
2           Federal agency that's tasked with managing  
3           the species have indicated to me in the past  
4           that there is, there is a possibility for  
5           liability under the ESA. So, you know,  
6           there's both ends to consider.

7 CHAIR MOLINA: Thank you. That's good information  
8           to share with the committee.

9           Okay. Mr. George?

10 MR. GEORGE: Yes, Hannah, I would appreciate if I  
11           could get that information so make it aware  
12           to our committees and everything. That would  
13           be really good information to have.

14 CHAIR MOLINA: And by the way, the information or  
15           the recommendations that have been made by  
16           Mr. George and Mr. Chong, Gary, will the  
17           Members be getting copies of those?

18 MR. SALDANA: Yeah, they should be in your, in your  
19           binders --

20 CHAIR MOLINA: Okay.

21 MR. SALDANA: -- dated February 5th.

22 CHAIR MOLINA: Okay. So we can go ahead and make  
23           comments. If you find there needs to be a  
24           comment or question asked along the way,  
25           please make sure you let us know.

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1                   Mr. Maberry?

2   COMMITTEE MEMBER MABERRY: Mr. Chairman, we've,  
3                   we've covered comments for two sections. Are  
4                   we at the point where we can, we can address  
5                   those presentations so far?

6   CHAIR MOLINA: Right. Let me ask. Mr. George, is  
7                   that -- You just had concerns on Sections  
8                   .070 and .080, and Mr. Chong?

9   COMMITTEE MEMBER CHONG: No, there's more. It's  
10                  just I thought we covered those --

11   CHAIR MOLINA: Okay. We just covered those two,  
12                  right?

13   COMMITTEE MEMBER CHONG: Yeah.

14   CHAIR MOLINA: So you have more. Okay.

15   COMMITTEE MEMBER MABERRY: Sir, if I may? I'd  
16                  appreciate it before we get too much on the  
17                  plate here --

18   CHAIR MOLINA: Okay.

19   COMMITTEE MEMBER MABERRY: -- if we could go back  
20                  and make some comments on these two sections  
21                  before --

22   CHAIR MOLINA: All right.

23   COMMITTEE MEMBER MABERRY: -- we add another  
24                  section. That would be my recommendation,  
25                  sir.

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1 CHAIR MOLINA: Okay. If there's a need to --

2 Proceed, Mr. Maberry, if you want to ask a  
3 question of Mr. George or Mr. Chong.

4 COMMITTEE MEMBER MABERRY: Yes, sir. Thank you  
5 very much.

6 Mr. Chong, based on the information  
7 that I received earlier under points of  
8 clarification information, is it true that  
9 under .080 number 2, I believe it is, that  
10 some of the street lamps currently on Maui  
11 highways would be only required to have  
12 partial shielding? If, if I got the numbers  
13 correct that the 100 watt, the 100 watt  
14 bulbs, you said, put out 7,000 lumens?

15 COMMITTEE MEMBER CHONG: No, that's not the intent.

16 I mean in .070 and what I call C, and  
17 actually I took that to --

18 COMMITTEE MEMBER MABERRY: Excuse me, .070.C.

19 COMMITTEE MEMBER CHONG: .070 is for C and D were  
20 the ordinance talks about wattages again and  
21 my recommendation is to eliminate the wattage  
22 issue but allow low pressure sodium and high  
23 pressure sodium in fully cut off luminaires  
24 and that would, that would cover any street  
25 lighting, period. The 10,000 is, is in the

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1           luminaire standards.

2   COMMITTEE MEMBER MABERRY: But lights as bright --

3           Pardon me if I'm interrupting you. Lights as

4           bright as street lights up to 7,000 lumens

5           will only require partial shielding on some

6           properties under, under .080.A-2.

7   COMMITTEE MEMBER CHONG: You could interpret it

8           that way and maybe it needs to be refined.

9   COMMITTEE MEMBER MABERRY: Thank you, sir.

10   CHAIR MOLINA: Okay. Is that it, Mr. Maberry?

11           Any other questions for Mr. Chong on

12           Section .070 or .080? Okay. Good.

13   ?: Mr. Chair?

14   CHAIR MOLINA: Okay. Mr. (\_\_\_\_)

15   ?: Is high pressure sodium acceptable to the

16           astronomy people?

17   CHAIR MOLINA: Okay. Maybe would that be Mr.

18           Maberry or Mr. Altenberg, would you like to

19           respond to that question?

20   ?: Actually I would like to have Dr. Wainscoat

21           address the issue of how much better is high

22           pressure sodium than, say, metal halide in

23           terms of astronomy. Is there a significant

24           advantage for high pressure sodium over metal

25           halide?

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1 CHAIR MOLINA: Okay. Let's respond to that. Could  
2 you repeat your question again for Dr.  
3 Wainscoat?

4 ?: My concern is whether HPS is acceptable, you  
5 know, along with low pressure sodium?

6 CHAIR MOLINA: Okay. Dr. Wainscoat?

7 MR. WAINS COAT: The, the most important thing I  
8 would say first is to shield the lights and I  
9 think that some of what I just saw was almost  
10 the status quo, that, that what we see over  
11 here, the 100 watt lamps, that you already  
12 have unshielded, and that was very  
13 disturbing.

14 In order of preference for astronomy, I  
15 think that the low pressure sodium is by far  
16 the most desirable. The high pressure sodium  
17 spectrum is sort like an opposite of a low  
18 pressure sodium spectrum, so it has a hole  
19 where the natural sodium emission is and it  
20 has a big continuance flashing everywhere.

21 Metal halide is arguably one of the  
22 most evil things for astronomy. It could any  
23 metal, any halogen in the lamp. It's  
24 whatever the latest thing that the lighting  
25 industry has made and could put spectral

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1           lines at any different color or wavelengths,  
2           and I'm quite concerned that at the moment  
3           that the draft ordinance doesn't address  
4           metal halide lamps at all, and mercury lamps  
5           are bad for astronomy as well.

6   CHAIR MOLINA: Okay. Thank you. Does --

7   MR. WAINSCOAT: I'm not sure --

8   CHAIR MOLINA: -- that answer your question?

9   MR. WAINSCOAT: I'm not sure if I said it was,  
10          whether it was acceptable or not. Maybe I  
11          avoided that a little bit.

12           We, we, we need to be realistic but I  
13          at the same time, I don't, I think if any of  
14          you have ever visited Europe, you'll find  
15          that low pressure sodium lamps are in  
16          extremely widespread use everywhere. Fully  
17          fielded fixtures are in extremely widespread  
18          use, and it is very different when you fly  
19          into a city to see what the light pollution  
20          is like and you see no lamps, you only see  
21          this, this reflection of the light from the  
22          ground.

23           If you fly into Kahului or to Honolulu,  
24          you see every lamp, and every lamp that you  
25          see is light that's wasted directed to the

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1           sky. And for me, it doesn't make any sense  
2           at all to be wasting energy and throwing it  
3           up into the sky. I just don't understand.  
4           It's a fundamental thing, that why are we  
5           wasting energy and throwing it up into the  
6           sky?

7 CHAIR MOLINA: Okay. Thank you, Dr. Wainscoat. I  
8           think you answered his question.

9           Mr. Maberry, before we proceed, we've  
10          got a request that please identify yourself  
11          just for the court reporters because we do  
12          have a lot of resource personnel here, so  
13          just to help out our court reporter to  
14          identify yourself before speaking.

15          Go ahead, Mr. Maberry to be followed by  
16          Ms. Bernard.

17 COMMITTEE MEMBER MABERRY: Yes, Mr. Chair. Thank  
18          you very much. That was another point on Mr.  
19          Chong's .070.B. I would like to follow up on  
20          sort of what Professor Wainscoat said.

21          Do you see that the, in this particular  
22          section that possibly we should address some  
23          restrictions on the use of metal halide in  
24          addition to some restriction on use of  
25          mercury vapor luminaires?

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1 MR. WAINSCOAT: I would think I'd be a lot more  
2 comfortable if metal halide lamps were  
3 addressed. They're not really mentioned here  
4 at all.

5 COMMITTEE MEMBER MABERRY: So your impression is  
6 from what you've heard so far that they could  
7 be used in, in cases where they wouldn't be  
8 reasonable shielding to protect astronomy?

9 MR. WAINSCOAT: I get that impression that there  
10 could be a lot -- They seem to be becoming  
11 more widely used by the lighting industry.

12 COMMITTEE MEMBER MABERRY: And if I could, you made  
13 a -- Pardon me, sir.

14 MR. WAINSCOAT: Go ahead.

15 COMMITTEE MEMBER MABERRY: You made a comment  
16 regarding that there doesn't seem to be any  
17 consistent standard that, that the lamps are  
18 developed under. I mean you were saying  
19 something about how the, the composition of  
20 the materials that make up the lamps may vary  
21 from manufacturer to manufacturer or  
22 something like that; is that my --

23 MR. WAINSCOAT: My understanding of a metal halide  
24 lamp is that it's not, not terribly different  
25 from a mercury lamp except that they add some

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1           trace and often rare elements that have  
2           appropriately colored spectral lines to  
3           color, to balance the color. And so a metal  
4           halide lamp will also emit some of -- have  
5           many of the same properties as a mercury  
6           lamp.

7   COMMITTEE MEMBER MABERRY: Thank you, Mr. Chair.

8   CHAIR MOLINA: Okay. Ms. Bernard to be followed by  
9           Dr. Altenberg.

10   COMMITTEE MEMBER BERNARD: Do I need to identify  
11           myself? Does she recognize me? Hannah  
12           Bernard.

13           I'd like to support the inclusion of  
14           metal halide as, as a light source that we  
15           would like to exclude along with mercury  
16           vapor in Mr. Chong's suggestions. It has  
17           been a light that's been determined to  
18           negatively affect sea turtles and their  
19           nesting habitat.

20           Just to remind you, in case some of you  
21           walked in and missed the earlier part of this  
22           meeting, we do have a form that shares the  
23           kind of lighting that is actually not to be  
24           used, should not be used in turtle nesting  
25           habitat. And the light sources are high

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1           pressure sodium vapor, metal halide and white  
2           incandescent lighting and mercury vapor, also  
3           fluorescent. So those are the lights that  
4           seem to be the most, have the most negative  
5           impact on turtles.

6 CHAIR MOLINA: Okay. Thank you, Ms. Bernard, Dr.  
7           Altenberg?

8 COMMITTEE MEMBER ALTENBERG: To address Dr.  
9           Wainscoat's question, the current ordinance  
10          draft as it stands addresses metal halide by  
11          prohibiting lamps that are 1800 or more  
12          lumens other than low pressure sodium or --  
13          and then any existing lamp lights that are  
14          1800 lumens or higher that are fully shielded  
15          are grandfathered in. So there are certain  
16          stock of metal halide lamps out there now  
17          that are fully shielded that would be  
18          grandfathered in.

19           So basically those would be the places  
20          where metal halide lamps would be permitted.  
21          Under 1800 lumens, they, they are not  
22          restricted in that way.

23 CHAIR MOLINA: Okay. Thank you, Dr. Altenberg.  
24           Okay. Mr. Chong followed by Ms. Bernard.  
25 COMMITTEE MEMBER CHONG: Metal halide lamps are

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1           popular with the lighting industry because,  
2           one, it is more efficacious than an  
3           incandescent source. The manufacturers have  
4           come up with new technology for metal halide  
5           lamps to where the point where the old metal  
6           halide lamps were closer, but better than the  
7           mercury lamps; in other words, they were  
8           better color rendition but still very blue in  
9           color.

10           The current batch of metal halide lamps  
11           that are the, are the rage in lighting design  
12           have color rendering indexes that are very  
13           close to quartz halogen lamps or any very  
14           good color rendering halogen lamps.

15           So if you start to eliminate metal  
16           halide or low wattage metal halide lamps,  
17           we're talking 39 watt lamps here that are  
18           about this big, we start to eliminate all the  
19           incandescent light sources too. So then do  
20           we need to include incandescent light sources  
21           that are a listed non -- as a listed  
22           prohibited lamp?

23           And the intent of my recommendation or  
24           suggestion was to allow some of these low  
25           wattage metal halide lamps not advocating 250

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1           watt or 400 watt metal halide lamps, but to  
2           allow the design community who addresses the  
3           resort community and all of the commercial  
4           people to be able to use some of these lower  
5           light lamps in a controlled environment, a  
6           controlled design environment; in other  
7           words, so many lumens per acre or something  
8           like that to where we -- our hands are not  
9           completely tied. That was the intent of the  
10          suggestion.

11           That's why the raising of the lumen  
12          output to 3000 versus 1800 would allow us the  
13          usage of low wattage metal halide lamps.  
14           They are more energy efficient. If you  
15          don't, if you delete -- If you don't delete  
16          the use of incandescent, then I'm just going  
17          to throw 100 watt incandescent lamps and  
18          still provide the same problems to  
19          astronomers.

20           And so there are some conflicts here  
21          that we need to be careful about. If we're  
22          going to start regulating metal halide lamps  
23          too, then we might as well do incandescent  
24          and everything else under the sun because  
25          they all provide a spectrum that you don't

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1           want to see in the sky including fossil  
2           fuels.

3           And, and the only reason why you  
4           haven't had a problem with fossil fuels is  
5           it's too expensive for me to light an entire  
6           resort with fossil fuels. We, we went down  
7           that path at Hapuna because it was exempted  
8           in the County, the Maui County Code, we  
9           actually tried to develop fossil fuel lamps  
10          for that project to stay within the  
11          ordinance, and the cost of building a  
12          luminaire and maintaining it was outrageous.

13 CHAIR MOLINA: Okay. Ms. Bernard?

14 COMMITTEE MEMBER BERNARD: Maybe this is a question  
15          for Dr. Altenberg. If you grandfather in the  
16          metal halide lamps that are fully shielded,  
17          do we need to add some language in that  
18          describes the location proximity to the  
19          beaches?

20 COMMITTEE MEMBER ALTENBERG: Lee Altenberg. I  
21          guess that's handled by the, the section on  
22          beach lighting that, that requires additional  
23          shielding beyond simple full shielding for  
24          any light. I mean that's perhaps more  
25          complex, a complex way of doing what Florida

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1           has done where they basically say if you can  
2           see the light standing on the beach it's,  
3           it's in violation.

4    CHAIR MOLINA: Okay. Does that answer your  
5           question, Ms. Bernard?

6    COMMITTEE MEMBER BERNARD: Yes, thank you.

7    CHAIR MOLINA: Members, at this point I'd like to  
8           remind you let's stay focused on Sections  
9           .070 and .080 with regards to questions and  
10          comments. And the Chair is going to call for  
11          a break. Let's return at 11:05. (Gavel.)

12   RECESS:       10:54 a.m.

13   RECONVENE:  11:07 a.m.

14   CHAIR MOLINA: (Gavel.) The Subcommittee on  
15          Outdoor Lighting is now back in session.  
16          Thank you, all Members, for being so  
17          expedient at getting back to your positions.  
18          You remind me one of my high level classes  
19          that I used to teach, such wonderful  
20          personnel here.

21           At this point what I'd like to do now  
22          is starting with Section .070 because that  
23          received the most concern from the  
24          Subcommittee, I'd like to now take it part by  
25          part if you will and come to some consensus

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1           with regards to some of the numbers that are  
2           mentioned in there.

3                 Starting with Section A of .070 where  
4                 it says "Low pressure sodium vapor lamps  
5                 shall be the only allowed lamp with 1800 or  
6                 greater lumens of output," Mr. Chong  
7                 suggested making a change to 3,000 or greater  
8                 lumens of output.

9                 I'd like to get comments from the  
10          Members at this time if that's a number we  
11          can agree or if there is another number at  
12          this point? Mr. Chong?

13       COMMITTEE MEMBER CHONG: Chairman, I also note that  
14         I included high pressure sodium.

15       CHAIR MOLINA: High pressure, yes. Okay. 3,000 or  
16         greater lumens of output, and also to add  
17         high pressure sodium in there as well as low  
18         pressure sodium.

19                 Ms. Bernard?

20       COMMITTEE MEMBER BERNARD: Hannah Bernard speaking.

21                 I already have stated my concerns with high  
22         pressure sodium so --

23       CHAIR MOLINA: So you would not be in favor of --

24       COMMITTEE MEMBER BERNARD: No.

25       CHAIR MOLINA: -- including --

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1 COMMITTEE MEMBER BERNARD: Well, not near the  
2 beaches.

3 CHAIR MOLINA: Okay. So no inclusion of HPS in  
4 that statement?

5 COMMITTEE MEMBER BERNARD: Uh-huh.

6 CHAIR MOLINA: Okay. Mr. Maberry, we'll just work  
7 our way down the, down the row.

8 COMMITTEE MEMBER MABERRY: Well, I don't believe I  
9 have a problem with 3,000. I really want to  
10 have additional discussion on that  
11 particularly -- Yeah.

12 CHAIR MOLINA: Okay. So you don't have a problem  
13 with 3,000 at this time. We can come back to  
14 you.

15 So, Ms. Bernard, you don't want HPS in  
16 there. As far as the 3,000, are you okay  
17 with that?

18 COMMITTEE MEMBER BERNARD: Just something I'd like  
19 to comment on. That the point is with sea  
20 turtle nesting, even, even with low pressure  
21 sodium it's better to have lower power, so I,  
22 I would need to look at the data and see  
23 what's recommended in Florida --

24 CHAIR MOLINA: Okay.

25 COMMITTEE MEMBER BERNARD: -- before I feel

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1           comfortable adopting 3,000.

2   CHAIR MOLINA: Okay. Or maybe a number somewhere  
3           in between? I won't hold you --

4   COMMITTEE MEMBER BERNARD: Yeah.

5   CHAIR MOLINA: -- to making a comment on that at  
6           this point.

7   COMMITTEE MEMBER BERNARD: Yeah.

8   CHAIR MOLINA: Mr. Chong, you have a question?

9   COMMITTEE MEMBER CHONG: Hannah, so you're not --  
10          Let me just take that a little further. You  
11          don't have a problem with high pressure  
12          sodium as long as it's not shining on the  
13          beach?

14   COMMITTEE MEMBER BERNARD: High pressure sodium --

15   COMMITTEE MEMBER CHONG: If we, if we were to  
16          include it in the ordinance specific  
17          restrictions on high pressure sodium in areas  
18          near beaches and other wildlife, just not to  
19          leave any of the biologists out, would you  
20          have a problem with high pressure sodium?

21   CHAIR MOLINA: Ms. Bernard?

22   COMMITTEE MEMBER BERNARD: If, if high pressure  
23          sodium were fully shielded from, from the  
24          beaches, then it wouldn't be a problem for  
25          the sea turtles. Speaking as a supporter of

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1           the dark sky for, for purposes of viewing the  
2           night sky, I would have a problem of any of  
3           the, the lights glaring into the sun.

4    CHAIR MOLINA: Well --

5    COMMITTEE MEMBER CHONG: Okay.

6    CHAIR MOLINA: Mr. Chong, go ahead.

7    COMMITTEE MEMBER CHONG: To the amateur astronomer  
8           I don't think their concern as -- there was  
9           testimony that central to all of us that  
10          they're concerned with low pressure sodium or  
11          high pressure sodium, they just want it fully  
12          shielded. I don't think that's a problem.

13   COMMITTEE MEMBER BERNARD: Right.

14   COMMITTEE MEMBER CHONG: The high, high tech guys  
15          on the top of the mountain are the guys that  
16          really need the pristine environment and  
17          that's why they promote low pressure sodium.

18   COMMITTEE MEMBER BERNARD: Right.

19   CHAIR MOLINA: Okay. So, so at this point would it  
20          be --

21   COMMITTEE MEMBER BERNARD: I see their point now.

22   CHAIR MOLINA: Okay. Would it be safe for me to  
23          say you're status quo on what's written and  
24          you don't want no changes at this point?

25   COMMITTEE MEMBER BERNARD: At this point.

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1 CHAIR MOLINA: Okay.

2 COMMITTEE MEMBER BERNARD: Perfect.

3 CHAIR MOLINA: Dr. Altenberg?

4 COMMITTEE MEMBER ALTENBERG: A general issue is

5 that, if I recall correctly, this, this 1800

6 lumen level was drawn from an existing

7 ordinance in another community, which I have

8 to find out which it was. And sort of my

9 philosophy has been if it's already working

10 somewhere else as a law, it, it must have the

11 chance at a lot of problems have already been

12 worked out for us and that when we make a

13 change to that, we ought to find out from the

14 community where that is existing code why

15 they didn't choose such a number themselves,

16 and what their experience has been, and what

17 kind of problems might be expected to happen

18 from the alteration in the ordinance that we

19 drew from them.

20 So I would want to look, look into and

21 do some research, contact the community which

22 would have the lamp standard before finding

23 out, before recommending a change.

24 Secondly, Rick Chong mentioned that

25 there is quite a, a high usage of these 39

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1           watt metal halide lamps; is that correct?

2 COMMITTEE MEMBER CHONG: That's (\_\_\_\_\_)

3 COMMITTEE MEMBER ALTENBERG: Yeah. And what I'm

4           wondering is how many of those usages would

5           fall outside of the exceptions under Section

6           .070 part 1?

7 CHAIR MOLINA: Okay. Mr. Chong?

8 COMMITTEE MEMBER CHONG: Quite a bit. I mean the

9           metal, low wattage 39 watt metal halide lamp

10          is being used in the outdoor environment to

11          light trees, up light trees.

12 COMMITTEE MEMBER ALTENBERG: Okay.

13 COMMITTEE MEMBER CHONG: Down-lighting a tree, I

14          need a pole that is taller than the tree or a

15          building so -- And that doesn't quite have

16          the same effect for the person who's looking

17          at the tree.

18 COMMITTEE MEMBER ALTENBERG: So, so that's not an

19          area where color rendition is necessary for

20          the effectiveness of an activity, it would

21          fall under the specific uses where we're

22          talking about architectural accent lighting.

23 COMMITTEE MEMBER CHONG: It could. In my, in my

24          short suggestion thing that I handed out, I

25          actually recommend we add to that special

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1           use, specific uses, a landscape lighting  
2           section that puts some limitations on up  
3           lighting and if, if we allow a little higher  
4           wattage lamps but we also say you can put one  
5           per tree or two per tree and no more than so  
6           many lumens over an acre, so we again  
7           minimize the light trespass or the light  
8           pollution into the night sky trying to find a  
9           compromised position first and not just  
10          letting a designer go hog wild and put 200 of  
11          these over an acre and really blow, blow the  
12          night sky out. You know, a balance, in other  
13          words, of what you're looking for and what I  
14          think the design community would be happy  
15          with.

16        CHAIR MOLINA: Okay. So Dr. Altenberg, do you  
17          prefer more time before making a decision on  
18          that?

19        COMMITTEE MEMBER CHONG: On that particular issue  
20          of the raising the 800 level to 3,000, I'd  
21          like to find out why 1800 was, was chosen  
22          instead of a higher value from the  
23          communities that have that experience and  
24          that will take, that will take some research  
25          and time.

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1                   And then I think Rick brings up a very  
2                   interesting idea which is also something that  
3                   I've also been thinking about, which is the  
4                   idea of an exclusion, to exclude a certain  
5                   number of lumens per acre from the shielding  
6                   requirement and from lamp, lamp spectral type  
7                   requirements. That's something that I  
8                   believe certain other communities have in  
9                   place, but I, I think that would also require  
10                  some more research to find out what the  
11                  levels of exclusion when -- have been  
12                  adopted.

13                  But that would be another way of  
14                  perhaps simplifying enforcement and  
15                  compliance, which is to say a given party  
16                  can, can use a certain amount of unshielded  
17                  light for whatever purpose they wish if the  
18                  total number of lumens that they're per acre  
19                  is under a certain limit.

20 CHAIR MOLINA: Okay. Thank you.

21                  Vice-Chair Tavares, we're in the  
22                  process of getting feedback on Section .070?  
23                  Would you like to give your comments on  
24                  Section A at that time or would you like to  
25                  do that a little later? Okay.

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1                   Mr. Maberry, you had agreed to 3,000  
2                   and, Mr. Chong, and I'm seeing Ms. Bernard  
3                   has objected to it and Mr. Altenberg at this  
4                   time is not ready to make a decision on 1800  
5                   versus 3,000. So at this point that leaves  
6                   us a margin of two, two, one and one, I  
7                   guess, and the Chair.

8                   Yes, Mr. Lee?

9    MR. LEE: Chair, on this item of 1800 or 3,000, if  
10               my interpretation is right, it says not allow  
11               lamps with 1800 or greater lumens. So in  
12               other words, there is a limitation of the  
13               maximum, 1800 is the maximum, or is that the  
14               minimum?

15   COMMITTEE MEMBER ALTENBERG: Any, any lamp that  
16               has --

17   CHAIR MOLINA: Mr. Altenberg?

18   COMMITTEE MEMBER ALTENBERG: This is Lee Altenberg.  
19               Any lamp that has more than 1800 lumens of  
20               output shall be low pressure sodium with the  
21               following exceptions given under section  
22               .070.1.

23   MR. LEE: No, but Mr. Chong is going to recommend  
24               that 3,000 be the lower limit. Does this  
25               1800 or greater limits you from putting in

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1           3,000?

2   CHAIR MOLINA: Mr. Chong?

3   COMMITTEE MEMBER CHONG: The way the paragraph  
4            reads is any lamp that has an output of  
5            greater than 1800 lumens, low pressure sodium  
6            is what you have to use.

7   MR. LEE: Why don't you recommend that between HPS  
8            or LPS --

9   COMMITTEE MEMBER CHONG: Right, so we're saying  
10          there are, there's two parts to my  
11          recommendation. One is to allow any lamp  
12          greater than 1800 lumens or whatever that  
13          value ends up being, and I'm recommending  
14          3,000, that LPS and HPS are permitted to be  
15          used.

16   MR. LEE: Thank you, Chair.

17   CHAIR MOLINA: Thank you, Mr. Lee. Mr. Maberry?

18   COMMITTEE MEMBER MABERRY: Comment if I may, sir?  
19          In, in this point for concern on my part. I,  
20          I just got through checking back on my notes,  
21          the current street lights, from what you  
22          gentlemen told me earlier, are only putting  
23          out between 11 and 12,000.

24   MR. LEE: That's based on 150 watt HPS. The 100  
25          watts is about seven, eight.

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1 COMMITTEE MEMBER MABERRY: Yes, sir. So if I, if I  
2 may, Mr. Chair, may I ask Mr. Chong what he  
3 would use 3,000 for?

4 CHAIR MOLINA: Mr. Chong?

5 COMMITTEE MEMBER CHONG: I wouldn't use it for  
6 street lights. This is not talking about  
7 street lighting, it's a general statement  
8 about lamps.

9 COMMITTEE MEMBER MABERRY: I, I recognize that  
10 but --

11 COMMITTEE MEMBER CHONG: So I would --

12 COMMITTEE MEMBER MABERRY: But the type of  
13 application would have -- excuse me, sir. Go  
14 ahead.

15 COMMITTEE MEMBER CHONG: We can use, we can use a  
16 lot of different applications for 3,000  
17 lumens to light again landscaping, to light  
18 buildings, architectural features, that kind  
19 of outdoor application, signage; the list  
20 could go on. It's just -- It has nothing to  
21 do with roadways. We, we -- A 3,000 lumen  
22 lamp for roadway lighting doesn't work, it is  
23 not enough light output.

24 CHAIR MOLINA: Okay. Mr. Maberry, any more?

25 COMMITTEE MEMBER MABERRY: No, sir. Thank you.

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1 CHAIR MOLINA: Okay. I'd like to get comments from  
2 Member Tavares, are you ready to give  
3 comments on this first paragraph of .070  
4 whether you agree with the 1800 versus the  
5 3,000 being recommended by Mr. Chong?

6 VICE CHAIR TAVARES: Well, I don't think it matters  
7 if I agree or not with the 18,000 or 3,000  
8 quite frankly because this is all above me  
9 and my technical knowledge and expertise, and  
10 I, I think that if this is what we wanted to  
11 with the task force to hammer out some of  
12 these details, but because of the Sunshine  
13 Law we actually couldn't get into the task  
14 force so I just look at this as the task  
15 force meeting.

16 CHAIR MOLINA: Right.

17 VICE CHAIR TAVARES: And the experts go at it with  
18 their recommendations. I think that the  
19 concerns that were brought out regarding the  
20 safety issues and the liability issues are  
21 what, as I represent constituents in Maui  
22 County what I would be looking for.

23 I'm also concerned that I want to see  
24 us focus on the light that's not going where  
25 it doesn't need to go. The criminals are not

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1           running around in the air, so we don't need  
2           to light the air so let's light what needs to  
3           be lit and figure out ways to direct the  
4           light properly and so we are actually  
5           lighting where we need to light.

6   CHAIR MOLINA: Because you mentioned earlier about  
7           shielding as one of your top priorities.

8   VICE CHAIR TAVARES: So I'm very interested in the  
9           shielding and I, I am also interested in the  
10          street lights, and what Mr. Lee had said  
11          earlier something about a rural and an urban  
12          standard that I wanted to ask him about. Do  
13          we have different standards for urban and  
14          rural in Maui County?

15   CHAIR MOLINA: Mr. Lee?

16   MR. LEE: Yes, we do.

17   VICE CHAIR TAVARES: We do. It finally passed with  
18          the State?

19   MR. LEE: Oh, no, we don't submit it to the State.  
20          We, under the Subdivision Engineering --

21   VICE CHAIR TAVARES: Standards?

22   MR. LEE: -- Committee, they, they adopted the  
23          standards --

24   VICE CHAIR TAVARES: I see.

25   MR. LEE: -- which was accepted by Council.

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1 VICE CHAIR TAVARES: Oh, I thought maybe the urban,  
2 that rural standards passed the State because  
3 there had been a proposal at one time for  
4 rural standards for lighting.

5 MR. LEE: Oh --

6 VICE CHAIR TAVARES: Or it was going to be proposed  
7 but somewhere it got shot down somewhere in  
8 the State Legislature.

9 MR. LEE: Yeah. Yeah.

10 VICE CHAIR TAVARES: But we won't go there.

11 MR. LEE: Yes.

12 VICE CHAIR TAVARES: Thank you.

13 CHAIR MOLINA: Thank you, Ms. Tavares.

14 Mr. McCord, I'd like to get your  
15 comments on this first paragraph on whether  
16 you think the standards should be set at 1800  
17 or 3,000 as suggested by Mr. Chong.

18 COMMITTEE MEMBER McCORD: I think my only comment  
19 is give me a break. I haven't a clue. I'm  
20 looking for the experts to help me in this  
21 too. I'm just connected with what Charmaine  
22 said. I just want enough light that it's  
23 safe and no more.

24 CHAIR MOLINA: Mr. Chong, this lighting is -- Well,  
25 what do you foresee with the problem with

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1           1800 again? I mean does it have an impact on  
2           safety?

3       COMMITTEE MEMBER CHONG: As far as safety if we're  
4           going to light pathways, it's the same  
5           problem with limiting pole heights and  
6           wattages on street lights only on a smaller  
7           scale. The lower the lamp wattage, the more  
8           I need, the closer together they have to be.  
9           It impacts, first, cost. It impacts  
10          aesthetics. It impacts maintenance. The  
11          more luminaires I put out there for my, my  
12          clients, the more we've got to change and  
13          fix, so we try to find the balance. And if  
14          we start limiting it to variable wattage, low  
15          lumen output, man, it's just -- I've just got  
16          to protect my client from liability also on  
17          his end, and so we have to make sure that  
18          there is appropriate and safe lighting where  
19          we think it needs to be. Upping the number  
20          from 1800 to 3,000 just gives us a little  
21          more pallet to use in our design process to  
22          address those issues.

23       CHAIR MOLINA: Okay. Thank you. Ms. Bernard  
24           followed by Dr. Altenberg.

25       COMMITTEE MEMBER BERNARD: Yes. It seems to me

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1           that we keep getting kind of bogged down  
2           between the safety and, and even traffic  
3           concerns. We bring that up over and over  
4           again.

5           And I, I just think that it would be  
6           worthwhile for us to have a presentation from  
7           some of the folks on the Big Island who have  
8           already dealt with this issue. They've  
9           already got low pressure sodium almost  
10          completely, and there are a couple of  
11          individuals who have expressed interest in,  
12          in coming over to share their manao with us.  
13          In particular, it looks like Lymen Takahi  
14          from Traffic Operations of Hawaii County and,  
15          and this transmittal from Bob Hakaita, who is  
16          or was the Subdivision Engineering Senate  
17          Committee Chairperson. They wrestled with  
18          the issue of safety and lighting.

19           It just seems like we really don't want  
20          to reinvent the wheel and struggle with --

21          CHAIR MOLINA: Sure.

22          COMMITTEE MEMBER BERNARD: -- issues that we've  
23          already had committees that have struggled  
24          with. So in -- And so we don't get bogged  
25          down in going through these things one by one

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1           without enough information, I'd just like to  
2           respectfully request that at our next meeting  
3           perhaps we could bring a couple of these  
4           resource people --

5   CHAIR MOLINA: We'll definitely consider that.

6   COMMITTEE MEMBER BERNARD: -- to share with us.

7   CHAIR MOLINA: Thank you.

8   COMMITTEE MEMBER BERNARD: And that might assist us  
9           in, in moving forward on this --

10   CHAIR MOLINA: We --

11   COMMITTEE MEMBER BERNARD: -- particular issue.

12   CHAIR MOLINA: Myself and Mr. Saldana have bandied  
13       about what the thought of maybe even having a  
14       site inspection on the Big Island, but if  
15       it's more cost efficient and more beneficial  
16       to the Members bringing them here, we can do  
17       that too, so I'm glad you brought that up.

18   COMMITTEE MEMBER BERNARD: Thank you.

19   CHAIR MOLINA: Thank you. Dr. Altenberg?

20   COMMITTEE MEMBER ALTENBERG: Yes. It sounded -- I  
21       didn't want there to be any confusion. When  
22       Rick was describing this 1800 watt, the 1800  
23       lumen limit. It's not a limit on how much,  
24       how bright a light you can use, it says that  
25       for bright lights, bright lights need to be

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1           low pressure sodium, okay? And not all  
2           bright lights, because then Section .070.1  
3           gives a list of exceptions to where bright  
4           lights need to be low pressure sodium.

5           So it's important to realize that this  
6           is not a section limiting how bright a light  
7           a designer can use.

8 CHAIR MOLINA: Okay. Thank you.

9 COMMITTEE MEMBER CHONG: Mr. Chair?

10 CHAIR MOLINA: Okay. We have Mr. Chong -- I'm  
11           sorry, Mr. McCord had his hand up followed by  
12           Mr. Chong and Ms. Bernard. Mr. McCord?

13 COMMITTEE MEMBER McCORD: This is definitely a  
14           layman's point of view but it seems to me  
15           that if we're going to talk about lumens, the  
16           County can impose lumens on our street lights  
17           I should think rather specifically.

18           Then when you get into the areas of  
19           outdoor sales, assembly, recreation, that  
20           kind of thing, there has to be some leeway  
21           for the type of activities that are going on.

22           So I don't see the real conflict.

23           You know, the 18 lumens ought to or if  
24           that's all it takes to light a street corner,  
25           then that's, you know, that ought to be it.

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1           And the engineers can tell us if that's  
2           enough lumens at a street corner for an  
3           intersection. You know, if it needs to be  
4           more on the rural -- less in the rural and  
5           more in the urban area, then set those  
6           standards, then talk about exceptions in  
7           areas where we're going to talk about  
8           different kinds often activities and the need  
9           for security or identifications, those kinds  
10          of things.

11        CHAIR MOLINA: Okay.

12        COMMITTEE MEMBER McCORD: But that's only from a  
13           layman's point of view; is that correct?

14        CHAIR MOLINA: Well, I'm not the expert on that.

15           Maybe we could -- Well, let's go to Mr.

16           Chong. Any resource person want to respond  
17           to Mr. McCord's question before going?

18           Okay. Mr. Nakao?

19        MR. NAKAO: Greg Nakao, Public Works.

20           I understand what he's saying. Maybe  
21           it should be separated, you know, with street  
22           lighting being one area of this ordinance;  
23           private lighting, shopping centers,  
24           commercial buildings, so forth being another  
25           area; and recreational facilities separate,

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1           you know? Split the ordinance up like I  
2           said. It seems to be the three main areas  
3           from what I can see. Thanks.

4   CHAIR MOLINA: Okay. That's a good suggestion.

5           Thank you. Mr. Piltz?

6   MR. PILTZ: Yes. Randy Piltz.

7           As far as commercial end, we'd like to  
8           keep it separate because most of the time  
9           they're concerned about the color rendition  
10          and limiting this to low pressure sodium  
11          would be very difficult for identification,  
12          sign lighting, facade lighting, architectural  
13          lighting in those areas; that would be very  
14          difficult for us to maintain and it would be  
15          just very, very difficult with -- and  
16          limiting the number of lumens per square foot  
17          or whatever you are trying to achieve here.

18           So as far as I'm concerned representing  
19          the commercial area, that we should try to  
20          increase the lumens and make sure that  
21          there's another light source other than low  
22          pressure sodium.

23   CHAIR MOLINA: Okay. Thank you, Mr. Piltz. Okay.  
24          Now, I'd like to go to Mr. Chong to be  
25          followed by Ms. Bernard.

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1 COMMITTEE MEMBER CHONG: My question is for Dr.  
2 Altenberg. This is just a clarification. I  
3 understand your point. You're not trying to  
4 limit the, the amount of light that somebody  
5 wants to put or -- but I think this, this  
6 paragraph is specifically stating that  
7 anything over 1800 lumens, the light source,  
8 the lamp that you use has to be low pressure  
9 sodium. I mean that's the way that I read  
10 and interpret this paragraph.

11 And if somebody in the County is going  
12 to say, "Mr. Chong, your design doesn't  
13 comply," it's because I've specified a  
14 luminaire that uses a lamp that uses, that  
15 puts out more than 1800 lumens and is not low  
16 pressure sodium. And so what I was trying to  
17 do in my recommendation was just to increase  
18 that bar a little.

19 CHAIR MOLINA: Mr. Altenberg?  
20 COMMITTEE MEMBER ALTENBERG: Well, I guess the bar,  
21 I believe, is already much, even much higher  
22 than that because of Section 1, and this also  
23 addresses Mr. Piltz's issue that these  
24 exceptions to the -- In other words, you  
25 would --

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1                 The low pressure sodium lamps would be  
2                 required if you had lamps provide an 1800  
3                 lumens that were not in areas where color  
4                 rendition was important, so in my mind it  
5                 would be important to try to focus the  
6                 attention on recrafting one so that it  
7                 better, perhaps better safeguards areas where  
8                 their color rendition is important for those  
9                 that are concerned about it.

10                 So perhaps I could ask Mr. Piltz a  
11                 question, are there -- You were talking about  
12                 commercial areas, are there any areas that  
13                 are not properly handled with the exceptions  
14                 under Section .070.1?

15     MR. PILTZ: Just let me review this one sec.

16                 In, in most instances I would say that  
17                 another light source other than low pressure  
18                 sodium would be suitable for our use and, and  
19                 in most cases would be metal halide and the  
20                 least acceptable would be low pressure  
21                 sodium.

22     COMMITTEE MEMBER ALTENBERG: Now -- Lee Altenberg  
23                 again -- the current draft would allow metal  
24                 halide in areas where color rendition is  
25                 important and so it would seem to me that it

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1           already meets your concerns, so --

2    MR. PILTZ: Yeah, but you're limiting --

3    COMMITTEE MEMBER ALTENBERG: Yeah.

4    MR. PILTZ: I'm sorry but you're limiting it to

5           1800 watts --

6    COMMITTEE MEMBER ALTENBERG: No.

7    MR. PILTZ: 1800 lumens and that's why Mr. Chong

8           was trying to bring that up to 3,000.

9    COMMITTEE MEMBER CHONG: No. Let me --

10   CHAIR MOLINA: Okay. Mr. Chong, go ahead.

11   COMMITTEE MEMBER CHONG: Can I answer? Mr. Chong.

12           Paragraph 1 is exceptions to the 1800 watts  
13           LPS requirements and, and maybe that list has  
14           to be expanded and we've got to be careful.

15           One man, one person, one designer's  
16           interpretation of what he, he thinks is  
17           critical for color rendition may not be the  
18           same for the County guy who's checking the  
19           drawings.

20           I mean I can, I can identify a lot of  
21           landscape architects and when I throw low  
22           pressure sodium on their tree, they're going  
23           to cry that the tree is not done any justice  
24           in the evenings and, you know, that kind of  
25           thing.

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1                   So we -- If the list is going to be  
2                   expanded I don't like -- I like the idea of  
3                   expanding that list. That would kind of  
4                   reduce my requirements here of 3,000 lumens  
5                   but we need to be more specific then.

6                   Landscape lighting, again maybe with  
7                   the limitation of lumens over an acre so that  
8                   we're not -- again, somebody's not going hog  
9                   wild with this lighting is something we need  
10                  to address.

11        CHAIR MOLINA: Okay. Mr. Chong, if I may add? I  
12                  think at this point what I'd like to see is  
13                  maybe if you and Dr. Altenberg can get  
14                  together, you know, prior to our next meeting  
15                  and come up with a number that you feel is  
16                  acceptable, because I think I echo what was  
17                  said earlier by some of the Committee  
18                  Members. I'm not a techie myself and I can  
19                  live with, you know, the 1800 or the 3,000 or  
20                  whatever is an acceptable number.

21                  So I can see there is some disagreement  
22                  with regards to the numbers so if maybe Dr.  
23                  Altenberg and Dr. Chong, you can get together  
24                  because my intention here is to move on here.  
25                  So let's --

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1                 You know, it's a very worthy  
2                 discussions but as Member Tavares has said,  
3                 because of the Sunshine laws, this I guess,  
4                 subcommittee to the subcommittee could not  
5                 get together so if you could work out the  
6                 details on that.

7                 As for me, I have no objections with  
8                 whatever wattage limitations you want to set  
9                 there.

10                 Dr. Altenberg?

11         COMMITTEE MEMBER ALtenberg: I guess it would be  
12                 extremely helpful if I could ask all the  
13                 resource people here to look at that list of  
14                 exceptions and find out if you're -- is your  
15                 need on that list. And if it's not on that  
16                 list, please describe what, what your need is  
17                 and so that we can evaluate is that need, you  
18                 know, compatible with preventing light  
19                 trespass and preventing light pollution of  
20                 the skies.

21         CHAIR MOLINA: Okay. Everybody get that concern?

22                 Mr. Alueta, you have a comment?

23         MR. ALUETA: Yes, I'm just trying to --

24         CHAIR MOLINA: Joe, for the record can you state  
25                 your name and department?

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1       MR. ALUETA: This is Joe from the Planning  
2                   Department. I'm just trying to make sure I  
3                   understand this carefully.

4                   Regardless of whether or not they use,  
5                   you know, high pressure sodium or low  
6                   pressure sodium, if they qualify for the  
7                   exemption, would the fixture itself still be  
8                   required to be shielded? And so my concern,  
9                   I think with Mr. Chong he's the one, he wants  
10                  to raise the number so he can use it so he  
11                  gets color retention with a tree at night.

12                 Why you want to see the tree at night, I  
13                  don't know yet, but that's just what we were  
14                  discussing here. It's like -- But I'm sure  
15                  you want to see the tree at night, but  
16                  wouldn't you still have -- it would still  
17                  have to be shielded correct?

18        COMMITTEE MEMBER CHONG: No.

19        MR. ALUETA: Or are these -- is this going to  
20                  basically say you --

21        COMMITTEE MEMBER CHONG: It's an exemption.

22        MR. ALUETA: Well, you kind of shoot yourself.  
23                  Then what's the point of the ordinance?  
24                  You're killing the whole point of reducing  
25                  the light pollution if you're going to

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1           allow --

2   COMMITTEE MEMBER CHONG: Well, that's why I also  
3           recommended that we put some limitations to  
4           the amount or the number of lumens we --

5   MR. ALUETA: Okay.

6   COMMITTEE MEMBER BERNARD: -- throw in an acre so  
7           that somebody isn't really bending the rules  
8           here and, and saying, "Okay. Light color  
9           rendition on landscape is critical and  
10           important and so I'm going to put in" --

11   MR. ALUETA: 50,000 little lights?

12   COMMITTEE MEMBER CHONG: No, let's go for a big  
13           number, one million lumens in an acre and it  
14           will stick out a sore thumb to everybody in  
15           the community, including observatories.

16           That's -- we're trying, not trying to do  
17           that. We're just trying to find a balance  
18           that --

19           There's lots of value in lighting  
20           landscape at night in the resorts. It  
21           creates ambiance. It creates romance, drama,  
22           lots of things, and, and all the resort  
23           people here will attest to that. That's  
24           very, a very important component to the  
25           resort in the evening.

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1 MR. ALUETA: So does darkness.

2 CHAIR MOLINA: Yes, in the right areas.

3 MR. ALUETA: Yeah.

4 COMMITTEE MEMBER CHONG: On the beaches, you know.

5 that kind of thing I don't have a problem

6 with. I'm trying to, you know, beat up

7 Hannah here. I agree. I like to sit on a

8 dark beach.

9 MR. ALUETA: Yeah.

10 COMMITTEE MEMBER CHONG: But I also understand

11 their concerns about safety of people coming

12 off the beach into their property.

13 CHAIR MOLINA: Okay. Gentlemen, yeah. That's a

14 very worthy discussion now, so again I'd ask

15 the resource personnel, if you have concerns

16 with regard to the request for, you know,

17 3,000 or greater lumens and adding HPS in

18 there along with LPS, please, you know, relay

19 your concerns to Mr. Chong or Mr. Altenberg

20 or just through this committee and we get

21 those concerns out.

22 I'd like to move on to Section 1.

23 COMMITTEE MEMBER BERNARD: Excuse me.

24 ?: Chair?

25 COMMITTEE MEMBER BERNARD: I was still waiting.

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1 CHAIR MOLINA: Oh, I'm sorry, Ms. Bernard.

2 COMMITTEE MEMBER BERNARD: No worries.

3 CHAIR MOLINA: I apologize.

4 COMMITTEE MEMBER BERNARD: No worries. I just  
5 wanted to add to, to the discussion. I did  
6 experience similar concerns that Joe raised  
7 over there, that we're basically creating  
8 this huge loophole and anybody can define  
9 what they really need an exemption for and  
10 it's going to be really -- that will be a  
11 place where battles will happen.

12 So what I'd love, I'd love to see is  
13 when Rick and Lee get together to discuss the  
14 appropriate lumen per acre that we look at  
15 also the code that Talousa County in Florida  
16 has adopted for protecting the beaches as  
17 well so that, you know, it's simple, it's  
18 straightforward. What they've got is  
19 basically just if you're standing on the  
20 beach and you can see the light, it's a  
21 problem and so --

22 CHAIR MOLINA: Where can they get access to the  
23 code, I guess? Do you have --

24 COMMITTEE MEMBER BERNARD: We have, we received a  
25 copy --

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1 CHAIR MOLINA: Oh, okay.

2 COMMITTEE MEMBER BERNARD: -- from, from Lee.

3 CHAIR MOLINA: All righty. Okay. Thank you.

4 COMMITTEE MEMBER BERNARD: Thank you.

5 VICE CHAIR TAVARES: Mr. Chair?

6 CHAIR MOLINA: Ms. Tavares?

7 VICE CHAIR TAVARES: Yeah. You know, as the  
8 discussion is going on I'm thinking it might  
9 be helpful to consider that there be a  
10 distinction made between safety lighting and  
11 decorative lighting, and that things like  
12 lighting a tree or a rock formation or  
13 whatever, I would consider that decorative  
14 lighting even though it would fall into  
15 landscape lighting, where lighting a pathway  
16 would fall under security, safety and  
17 security.

18 And I would like to see us talk about  
19 putting in a time limit for when these lights  
20 can be on.

21 COMMITTEE MEMBER McCORD: Agreed.

22 VICE CHAIR TAVARES: And then you cut off the  
23 lights -- If these are decorative lights and  
24 you want to light your tree, fine. Look at  
25 it until, you know, ten o'clock at night and

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1           then it goes, then cut it off. I mean who's  
2           out there looking at it and sometimes if  
3           you've got these attractions you're going to  
4           attract people to that area to see whatever  
5           it is and maybe this could contribute to, you  
6           know, other activities taking place. But,  
7           you know, I think there maybe needs to be a  
8           distinction between your so-called decorative  
9           and your lighting for safety.

10          CHAIR MOLINA: And setting time parameters.

11          VICE CHAIR TAVARES: Yes.

12          CHAIR MOLINA: Okay. Members -- Mr. Chong?

13          COMMITTEE MEMBER CHONG: Vice Chair, don't ever  
14           think that you cannot make comments to a  
15           techie.

16           If, if, I don't know if you read our  
17           copy of this. In my edition of adding in  
18           special things for landscape lighting, it was  
19           not only lumens per acre, I had also  
20           recommended that there was a time set.

21           The aesthetic value of a tree is  
22           important to the resorts up until the guests  
23           go to sleep, and the guy who is still walking  
24           the grounds at one o'clock in the morning, he  
25           may run into the tree and not know it so

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1           that's not important, so set a time limit,  
2           whether it's eleven p.m. or twelve a.m. and  
3           exclude pathway lighting because of safety  
4           again, that's not a problem. I think that's  
5           a great idea.

6   CHAIR MOLINA: Okay. Thank you.

7           Okay. Members, let's look at Section 1  
8           now, the statement where it says, "In areas  
9           where color rendition is needed to preserve  
10          the effectiveness of the activity."

11          Mr. Chong has recommended we add HPS in  
12          addition to LPS lamps are not required.

13          Comments? We'll start with Dr. Altenberg  
14          first.

15   COMMITTEE MEMBER ALTENBERG: HPS is not current --  
16          in the current draft is not required for  
17          those areas where the exemptions are, so it  
18          would seem that that was a redundancy.

19   COMMITTEE MEMBER CHONG: Well, it goes back to  
20          paragraph A.

21   CHAIR MOLINA: Mr. Chong?

22   COMMITTEE MEMBER CHONG: Where I had recommended  
23          LPS and HPS over 1800, and so that's just  
24          carrying that same theme through the, through  
25          the entire section. That's, that's what --

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1 COMMITTEE MEMBER ALTENBERG: I see. Okay.

2 CHAIR MOLINA: Okay. Thank you. Miss Bernard, any  
3 comments to that?

4 COMMITTEE MEMBER BERNARD: You still haven't  
5 resolved the HPS issue in the first paragraph  
6 so --

7 CHAIR MOLINA: Okay.

8 COMMITTEE MEMBER BERNARD: -- until that's done,  
9 there's no --

10 CHAIR MOLINA: So you have no position at this  
11 time?

12 COMMITTEE MEMBER BERNARD: None.

13 CHAIR MOLINA: Okay. How about you, Mr. Maberry?  
14 We're looking at adding in HPS --

15 COMMITTEE MEMBER MABERRY: Yes, sir.

16 CHAIR MOLINA: -- to this statement.

17 COMMITTEE MEMBER MABERRY: I, I don't see that it's  
18 necessary at this point, the LPS or HPS  
19 issue.

20 CHAIR MOLINA: Okay. So you could live with  
21 either/or?

22 COMMITTEE MEMBER MABERRY: No, no, sir, I don't.  
23 Until we resolve the LPS, HPS issue, I don't,  
24 I don't think it's -- It just seems out of  
25 order to --

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1 CHAIR MOLINA: Okay.

2 COMMITTEE MEMBER BERNARD: -- to try to address it  
3 now.

4 CHAIR MOLINA: All right. Something more for Dr.  
5 Altenberg and Mr. Chong to work out then.

6 Okay. Mr. McCord, any comments? No.

7 Ms. Tavares?

8 VICE CHAIR TAVARES: No comments --

9 CHAIR MOLINA: Okay. We'll come back.  
10 VICE CHAIR TAVARES: No, I know what it is. Is  
11 there anywhere that we can see a  
12 demonstration of what these different lights  
13 look like here on Maui? Is there a place  
14 that has low pressure sodium, is there a  
15 place that has high pressure sodium, metal  
16 halide --

17 ?: Halide.

18 VICE CHAIR TAVARES: -- or halide or whatever it is  
19 or --

20 CHAIR MOLINA: We --

21 VICE CHAIR TAVARES: Or if there is a video that  
22 shows it? I mean there must be some folks  
23 out there that have got samples that they  
24 could show us so we can get kind of a better  
25 understanding from -- you know, the lay

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1           people that are on this panel can kind of  
2           understand what that looks like. And what  
3           will a mixture accomplish? If we say you can  
4           use so much of this and so much of this and  
5           what is the effect that way?

6           I sure didn't like the demonstration of  
7           the --

8 CHAIR MOLINA: The flag?

9 VICE CHAIR TAVARES: -- low pressure sodium. Our  
10          flag was blue and white. That was about it.  
11          And since I taught at Maui High, that's fine  
12          but, you know, we have those kind of  
13          concerns, I think. And if there was a way to  
14          show us in pictures or video or something,  
15          there must be something out there that kind  
16          of can explain what some of those  
17          combinations look like.

18 CHAIR MOLINA: Okay. Mr. George?

19 MR. GEORGE: Yes. This is Bill George. I'd be  
20          willing to volunteer to set up some kind of  
21          demonstration with the approval of my boss.  
22          Like I say, I'm not here representing him but  
23          I could buy a couple more of those lights,  
24          set up the white light or HPS, you know, some  
25          fluorescents, light the same fixture, turn

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1           off one at a time and see what they look  
2           like. So I'd be, I'd be willing to volunteer  
3           that and at the disposal of the committee,  
4           subcommittee.

5   CHAIR MOLINA: Okay. And where would this be at,  
6           Mr. George?

7   MR. GEORGE: It would probably be at the  
8           Renaissance Wailea property.

9   CHAIR MOLINA: Okay. Members? All righty. Ms.  
10          Bernard?

11   COMMITTEE MEMBER BERNARD: So we're talking about a  
12          demonstration at night, okay. Yeah. I'm  
13          thinking in terms of replicating the natural  
14          environment as best we can rather than inside  
15          a room like this and seeing these colors  
16          without the benefit of stars or the moon.

17          Thank you.

18   CHAIR MOLINA: Okay. Thank you. And we'll take  
19          that suggestion under consideration and  
20          inform all Members as to when and -- when we  
21          can have this light inspection, I guess if  
22          you could call it that.

23          Okay. Taking a look now at 1-a, it  
24          currently reads in the draft, "outdoor sales  
25          or eating areas during business hours," I

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1 believe that was the same as what Mr. --  
2 I'm sorry. Mr. Chong, you wanted it to  
3 read "outdoor sales or dining areas during  
4 business hours." Any comments on that, Mr.  
5 Chong, or from the Members?  
6 COMMITTEE MEMBER CHONG: Well, that's --  
7 CHAIR MOLINA: Semantics?  
8 COMMITTEE MEMBER CHONG: Just a play of words,  
9 yeah.  
10 CHAIR MOLINA: Okay. Corporation Counsel Garneau?  
11 MR. GARNEAU: Yes. I just have one comment on  
12 this. In terms of enforcement for the  
13 department down the road, it's best if we  
14 define business hours here. Business hours  
15 could be completely different things. It  
16 could be all night or --  
17 CHAIR MOLINA: Okay. Maybe we should add a -- be  
18 more specific what are the so-called business  
19 hours? Okay. At this point the Chair will  
20 entertain suggestions for what are so-called  
21 normal business hours.  
22 Maybe Corp Counsel, if you could add to  
23 what you have already seen in other  
24 ordinances with regards to business hours.  
25 MR. GARNEAU: Well, I guess I would ask the

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1           resorts, you know, are their eating areas  
2           open until eleven or twelve or what, whatever  
3           that standard would be, because this would  
4           probably apply mostly in the restaurant  
5           situations or bar situations. So, you know,  
6           I, I would just be, would like to be more  
7           specific because certainly in resorts even  
8           after their main areas may be closed, there  
9           may be other places that are still selling  
10           things all night long. I don't know. So for  
11           enforcement, I, I would like it to be  
12           consistent.

13        CHAIR MOLINA: Okay. We'll start with Dr.  
14           Altenberg.

15        COMMITTEE MEMBER CHONG: I guess the original  
16           intent was that business hour being the, the  
17           time that the business is operating. There  
18           was no intent to try to set a limit as to  
19           when a business could operate, so if, if a  
20           bar, you know, in Wailea, an outside bar was  
21           operating until two in the morning, that  
22           would be its business hours, but --  
23           And in terms of the scope issue raised  
24           by Bill George, it would, wouldn't apply to  
25           the entire resort but it would be to the

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1           facility that is operate -- that is operating  
2           at the time as to where this, you're talking  
3           about this exception to low pressure sodium.  
4           So the fact that the bar is open or, you  
5           know, there's a sandwich shop open all night  
6           long at the Grand Wailea wouldn't mean that  
7           the entire Grand Wailea was exempt but just  
8           the area where that sandwich shop is being  
9           lit.

10         CHAIR MOLINA: Okay. Thank you. Ms. Bernard?

11         COMMITTEE MEMBER BERNARD: In, in keeping  
12           consistent with Mr. Chong's earlier  
13           recommendations of going to eleven p.m., in  
14           terms of the nesting timeframe of the  
15           females, that's -- they can nest at sunset  
16           but, you know, I think we could --

17         CHAIR MOLINA: We're talking specifically turtles  
18           at this time?

19         COMMITTEE MEMBER BERNARD: Turtles, yeah.

20         CHAIR MOLINA: Oh.

21         COMMITTEE MEMBER BERNARD: In the spirit of  
22           compromise with all the other beach users,  
23           the humans, and others, I would say that, you  
24           know, eleven o'clock, like you recommended  
25           for some of the other activities, might be a

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1           good cutoff time. However, the hatchlings do  
2           come, they can come out right at sunset and  
3           they are attracted to the light.

4           So it is the hatchlings that, who are  
5           actually vulnerable to, to death, to being  
6           run over by cars or to being, or to crawling  
7           into a place and get suffocated and die. And  
8           again, that could result in a taking under  
9           the ESA. That would not be, that would not  
10          be good for the facility that is operating  
11          it.

12          But I see that this is, this is a  
13          vulnerable place, so a bar on the beach, for  
14          instance, could say, "We need an to have  
15          exemption because this is an activity. We  
16          need to be able to see the right colors for  
17          whatever reason and keep it going past all  
18          hours," but eleven o'clock, although it may  
19          not be optimum for hatchlings, I'd just throw  
20          that out there as a suggestion for at least  
21          one end point timeframe.

22 CHAIR MOLINA: Thank you. Let's go to Mr. Maberry.

23          No.

24 COMMITTEE MEMBER MABERRY: We don't have bars on  
25          the beach, do we?

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1 COMMITTEE MEMBER BERNARD: We have, we have.

2 CHAIR MOLINA: Anybody from the hotel would like to  
3 respond to that? Maybe Mr. Hoonan.

4 COMMITTEE MEMBER McCORD: They can't be on the  
5 beach, they can be next to the beach. (\_\_\_\_)

6 CHAIR MOLINA: Okay. Let's have Mr. Hoonan respond  
7 to your concern, Mr. McCord.

8 MR. HOONAN: This is Rob Hoonan. No, we are not  
9 allowed to have bars on the beach, per se.

10 There are bars that would be probably within  
11 our; for instance, our property that would be  
12 within that 100 meter mark that was  
13 illustrated earlier. These do have operating  
14 hours. Eleven o'clock would probably cut  
15 short some of those facilities, so we'd have  
16 to be careful there.

17 But no, we're not allowed to have  
18 anything directly on the beach. Typically  
19 events are over by eleven o'clock. We don't  
20 have -- We have very few that are beyond  
21 that, so I think that eleven clock probably  
22 is a fairly good time but I'd be concerned  
23 about clients that, you know, that would want  
24 to go further on a case by case basis, I  
25 guess.

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1 COMMITTEE MEMBER McCORD: It would seem to me that,  
2 granted, we have an establishment near a  
3 beach; however, even though it's, it's there  
4 for the ambiance of the beach, if the lights  
5 are shielded so that you don't have a lot of  
6 light on the beach itself, it would seem to  
7 me that, you know, we could save the little  
8 turtles and drink at the same time.

9 CHAIR MOLINA: Thank you, Mr. McCord. Ms. Bernard,  
10 comment?

11 COMMITTEE MEMBER BERNARD: Another possibility is  
12 at a certain time, say after eleven o'clock,  
13 the lights shift over to LPS and so you don't  
14 have the same effect. You have a lot less  
15 clientele after eleven o'clock. Maybe you  
16 wouldn't have the impact on the animals and  
17 it would be less of a concern.

18 I think again for the resorts we're  
19 talking about here and the business  
20 establishments that are close to the water's  
21 edge, there's an opportunity here for these  
22 businesses to capitalize on the fact that we  
23 have endangered species, protected species  
24 that are nesting, that are living here and  
25 that they can help in their protection.

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1                   And that's what they do in Florida and  
2                   it's actually quite successful and visitors  
3                   are participating in the conservation of  
4                   these animals so then they're attracted to  
5                   these areas because of that and it's a win  
6                   for all involved.

7 CHAIR MOLINA: Thank you. Ms. Tavares, no comments  
8                   on these?

9                   Okay. I, I just want to -- Oh, go  
10                  ahead, Mr. Hoonan?

11 MR. HOONAN: Rob Hoonan again. Ms. Bernard, I want  
12                  to -- I appreciate your comments. I do want  
13                  to know that you did meet with us, our group,  
14                  and I personally took your suggestions to  
15                  heart and design in our recent upgrades at  
16                  our facility.

17                  So I just want to make sure the hotel  
18                  industry isn't portrayed as somebody that's  
19                  not cognizant of, of the environmental issues  
20                  with natural resources here on Maui. I  
21                  definitely think that it's the opposite. We  
22                  really want to encourage obviously -- for  
23                  obvious reasons. There's a, you know, value  
24                  for our guests but also as residents here on  
25                  the island that we really do care and we

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1           would like to -- we're trying to work a  
2           compromise here but just don't -- I want you  
3           to make sure you understand that we do really  
4           care.

5    COMMITTEE MEMBER BERNARD: Thank you.

6    MR. HOONAN: Mahalo.

7    CHAIR MOLINA: Dr. Altenberg, you had a response?

8    COMMITTEE MEMBER ALTENBERG: No. I think a  
9           question for Corporation Counsel, which is  
10          the way this thing, the current draft is laid  
11          out, there are some additional requirements  
12          in the beach areas that are more restrictive  
13          than, say the -- what we're looking in right  
14          now. I mean they're more restrictive in  
15          terms of shielding, which we haven't gotten  
16          to yet.

17           But Hannah raised the question of low  
18          pressure sodium or non-low pressure sodium  
19          lights operating late into the night in  
20          businesses that were, that operated late, so  
21          that's an issue that would be dealt with  
22          later under the, the specific beach  
23          restrictions.

24           Now -- And it seems like that generated  
25          some confusion because, because the beach,

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1           it's a separate section, so I'm wondering  
2           is -- to, to avoid any possible legal  
3           confusion in how it's interpreted, should  
4           anything that was more restrictive be  
5           included in that section itself or -- and so  
6           should the section on the extra restrictions  
7           for beach lighting can somehow be moved into,  
8           say, luminaire standards or --

9    CHAIR MOLINA: Mr. Garneau, comment?

10   MR. GARNEAU: Dr. Altenberg, which section are you  
11       talking about with the beach standards? I  
12       don't know if I can see it.

13   COMMITTEE MEMBER ALTENBERG: Let's see. It's .080  
14       paragraph D. That's the section that talks  
15       about the 100 meters right under luminaire  
16       standards. And that was the only reference  
17       to the beach.

18   MR. GARNEAU: Yeah, that's right. Okay. So that  
19       would look all right.

20   COMMITTEE MEMBER ALTENBERG: Perhaps then Hannah  
21       had questions, concerns about the lamp  
22       standards in regards to businesses operating  
23       late at night. Should there, should anything  
24       be included under .070?

25   MR. GARNEAU: Regarding, regarding the beach?

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1 COMMITTEE MEMBER BERNARD: Yeah, I, I would just  
2 hate to see a business -- I can't imagine  
3 that one would, you know, pick out this chunk  
4 and say, "Okay. I've got this and this tells  
5 me what I can do," and not look at the whole  
6 ordinance, but, but like Lee said we don't  
7 want -- we want to make this as easy to  
8 access as possible so it is well understood.  
9 And so yeah, I wonder about maybe adding this  
10 or pulling this paragraph sort of as a  
11 condition up into .070. I don't know. It  
12 could just be made reference to.

13 COMMITTEE MEMBER CHONG: Well, I don't think so  
14 because .070. --

15 CHAIR MOLINA: Mr. Chong? I'm sorry.

16 COMMITTEE MEMBER CHONG: .070 is a lamp -- I mean  
17 the topic in .070 is lamps, light bulbs,  
18 okay? It's not talking about cutoffs, it's  
19 not -- I mean that's not the specific topic.  
20 It's talking about what you're allowed to use  
21 as a lamp source.

22 And so putting in the beach paragraph,  
23 if you want to talk about the beach, then  
24 you're going to say if it's shining on the  
25 beach, it's got to be low pressure sodium,

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1           that kind of thing as a lamp source, and not  
2           say anything about cut off. That's covered  
3           in the luminaire section. That's why it's  
4           sitting in there; am I correct, Dr.  
5           Altenberg?

6    COMMITTEE MEMBER ALTENBERG: Well, the presumption  
7           from .080 is that because of the extra  
8           shielding no matter what kind of a lamp it  
9           is, it's not going to be shining on the  
10          beach, so the concern -- there wasn't a  
11          concern for restricting lamp standards near  
12          beach areas.

13           So, so in fact a, an all night sandwich  
14          shop if it opened at the Grand Wailea with  
15          outdoor seating could use metal halide lights  
16          all night long as long as they were shielded  
17          and not shining on the beach, so I'm saying  
18          that -- under the current draft, so I'm  
19          saying is that, does that adequately protect  
20          them?

21    CHAIR MOLINA: Okay. Members, I'd like to focus  
22          back on Mr. Garneau's original concern was at  
23          the setting what are -- defining what are  
24          business hours here, so if we can come up  
25          with a timeframe of what are business hours.

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1                 Now, I know that's a very vague term.  
2                 You have places that are open 24 hours; you  
3                 have places that are open, you know, seven at  
4                 night, eleven at night. So I think what we  
5                 should focus on right now is let's, let's set  
6                 up some, what are the so-called business  
7                 hours or should we just leave that open being  
8                 that so many businesses are open at different  
9                 times?

10                So for me, my suggestion, and I know  
11                the Corporation Counsel has a concern with  
12                that, but if you want to go ahead -- And can  
13                we just leave it as business hours because  
14                it's such a vague term, Mr. Garneau?

15    MR. GARNEAU: Well, my concern is with enforcement,  
16                down the road, somebody is going to have to,  
17                someone in the County is going to have to  
18                enforce it, so if there was 24-hour outdoor  
19                sale or eating area, then that would be okay  
20                under this ordinance.

21                If the question is, if the point is to  
22                allow this exception while still protecting  
23                the, you know, the beach area, then you need  
24                to limit it in some way, otherwise people are  
25                going to say, "Okay. Well, we're 24 hours so

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1           this doesn't apply."

2   CHAIR MOLINA: Okay. Ms. Bernard followed by Dr.

3           Altenberg and Dr. McCord.

4   COMMITTEE MEMBER BERNARD: Yeah. This gets, it

5           gets right back to Lee's comments regarding

6           the kind of light. If it's fully shielded

7           but it's near the beach and you can see it

8           from the beach, if you can see it from the

9           low tide line, if you can see it from the

10          water line, if you can see the light, that

11          means a turtle can see them. And if it's a

12          female, she won't come up to nest. If it's a

13          hatchling, it'll go to that light.

14           So that, so I think maybe what we want

15          to do here is add in a sentence that follows

16          along with Florida's code where it specifies

17          even in this section that, that it shouldn't

18          be visible from the beach. So however the

19          shielding occurs, it could be metal halide as

20          long as you can't see it from, from the

21          beach.

22           Now, for the, for the hatchlings, if

23          they're going to be pulled to that light,

24          again this could be result in death which no

25          facility wants to be, you know, contributing

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1           to, so it's, it's that important. And if it  
2       means that we just put a clause in there that  
3       says you just can't see this particular light  
4       from the beach --

5           If it's low pressure sodium, what the  
6       point is you can see it from the beach and it  
7       doesn't seem to affect the turtles. Studies  
8       have shown that sea turtles will still nest  
9       with low pressure sodium visible. If it were  
10      high pressure sodium, metal halide,  
11      incandescent, they're not going to come  
12      ashore to nest but that's, it's just that  
13      simple.

14     CHAIR MOLINA: Okay. Dr. Altenberg?

15     COMMITTEE MEMBER ALTENBERG: The -- I would change  
16       the wording to reflect the original intent of  
17       that line. I would change Section A to be  
18       "outdoor sales or dining, eating areas during  
19       their hours of operation." That was the  
20       original intent.

21           Because business hours could be some  
22       kind of community norm and we're not -- it's  
23       not referring to that, it's referring to  
24       specific hours of operation of the facility  
25       that you're accepting the low pressure sodium

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1 requirement from.

2 CHAIR MOLINA: Mr. Garneau, do you want to comment  
3 on that suggestion?

4 MR. GARNEAU: Yeah, it's just, I don't know. Maybe  
5 no one else has a problem with it. I'm just  
6 thinking maybe it doesn't -- They have to ask  
7 (\_\_\_\_\_) smashed. I just think if it does  
8 matter, then it should maybe some sort of set  
9 hours like no later than two p.m. or  
10 something. You know, put some, whatever the,  
11 the last possible amount of time that you  
12 would want, no later than whatever, whatever.

13 But to me if it's not defined, it's  
14 like with all ordinances, whatever isn't  
15 defined will become your standard, so, you  
16 know, when you write an ordinance, you have  
17 to think about people when they plan, they  
18 look and say, "Okay. Well, what's  
19 allowable?" And so whatever is allowable  
20 becomes the standard. Does that make sense?

21 So if you don't define things, then  
22 people will decide what it means for you.  
23 I'm not saying that that's a bad thing, you  
24 may want to leave it that vague, but there  
25 will be people that'll say, "Well, you know,

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1           bar business hours are all the time and so  
2           we, we don't have to have lighting needs in  
3           an area."

4    CHAIR MOLINA: Okay. Mr. McCord to be followed by  
5           Mr. Maberry.

6    COMMITTEE MEMBER McCORD: Let's try perhaps  
7           rewriting this thing. I understand what he's  
8           trying to say with this normal business hour  
9           situation and anything that, that occurs  
10          beyond eleven o'clock, be it a bar or an all  
11          night eatery or something, whatever the  
12          hotels, those aren't really normal, those are  
13          exceptions.

14           Maybe what we need to do is say normal  
15          business hours end at eleven o'clock and here  
16          are the standards for that area, and after  
17          eleven o'clock if the business continues, it  
18          has to abide by a stricter standard. And  
19          that would then fill that loophole.

20    CHAIR MOLINA: Okay. Mr. McCord, we have from the  
21          hotel association as one of our resource  
22          persons, Terryl Vencl. Terryl, if you want  
23          to go ahead and respond.

24    MS. VENCL: Aloha. Thank you very much, Mr.  
25          Chairman. I'm sorry. I just can't be quiet

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1           any longer.

2    CHAIR MOLINA: Okay. Terryl, can you go ahead and  
3           state your name for the record?

4    MS. VENCL: Terryl Vencl, Maui Hotel Association.

5           Certainly the resorts are concerned but there  
6           are a lot of people even outside the resorts.

7           As I sit here and I listen to this  
8           conversation, I get very concerned about the  
9           people up and down Front Street in Lahaina.

10          I get concerned about Leilani's and Hula  
11          Grill over on the west side in Whaler's  
12          Village. There's a lot of people who are not  
13          here and are not really represented that are  
14          going to find problems with this 100 meter  
15          thing and how we decide what their hours  
16          should be. And frankly, those people go  
17          until all kinds of different times.

18          If I were to pick and choose anything  
19          that's been suggested at that point, I think  
20          Dr. Altenberg has the answer and that's hours  
21          of operation, whatever that business' hours  
22          of operation is. If we have to put something  
23          there, that's what their hours of operation  
24          are and we don't tell them in that particular  
25          circumstance how to decide what those hours

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1           are.

2           I, I think that this -- I'm not a  
3        techie and I don't understand a lot of what's  
4        being said with regard to luminaires and  
5        those kinds of things, but I do know that  
6        people have to be able to do their business.

7           I do know that tourists have to feel safe and  
8        secure. And I do know that we can't shut  
9        down the economy of Maui County. And it  
10      seems to me that we're caught up in so much  
11      comprehensive stuff that that's what is  
12      eating away at the time that the, that the  
13      Chair has put on this rather than mixing that  
14      with a little bit of common sense.

15           So I guess at this point I'd like to,  
16        to think that if we take a piece, a piece of  
17        this, maybe even three pieces is too much it  
18        seems today. While I commend trying to come  
19        down to something, if we talk about shielding  
20        and if we deal with that issue, I wonder if  
21        that wouldn't solve a great deal of the  
22        problem that we have. And if we got that  
23        far, then we decide what the next piece is  
24        that we bite off and try to chew.

25           Thank you for letting me explode.

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1           Thanks a lot, Mr. Chairman.

2   CHAIR MOLINA: Okay. Thank you, Terryl. Your  
3           comments are always appreciated.

4           Members, any comments? Mr. Maberry?

5   COMMITTEE MEMBER MABERRY: I'm just actually kind  
6           of following up on what she said. You know,  
7           if I go, if I go to Hula Grill and want to  
8           get some food and there's nobody there and  
9           they've got all their lights on, then I'm  
10          going to call somebody and complain. I mean  
11          this is business hours of operation. And if  
12          they're not there doing business, then they  
13          shouldn't have their lights on.

14   CHAIR MOLINA: Okay. We have Mr. McCord followed  
15          by Ms. Bernard.

16   COMMITTEE MEMBER McCORD: Warren McCord. Don't you  
17          think that the businesses would be  
18          appreciative of the sensitivity of what we're  
19          trying to do here by making some adjustment  
20          after certain periods of time?

21          You know, for example, if Kimo's and  
22          Hula Grill and all these places are open past  
23          eleven o'clock, then they might be willing to  
24          adjust their glare on the water or the  
25          beaches at that point. You don't have to go

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1           out of business just to make an adjustment so  
2           that we can accomplish both purposes, stay in  
3           business and, and secure the environment.

4     CHAIR MOLINA: Proceed, Terryl.

5     MS. VENCL: I believe that they would certainly be  
6           sensitive to what you're trying to do. I  
7           can't answer for them because I, I don't run  
8           their businesses, but off the top of my head  
9           I would know that there may or may not be a  
10          concern about the cost of retrofitting to do  
11          whatever is being talked about. That would  
12          be the first thing that would pop up in my  
13          mind.

14           As long as they could deal with the  
15          retrofitting, as long as their people in  
16          their areas would feel safe, I think that  
17          yes, they would be sensitive to this. I just  
18          don't know what the cost would be or, or -- I  
19          just can't speak for them. I would be happy  
20          to bring some of them to a meeting to testify  
21          about this particular issue and maybe they  
22          could give you better information than I can,  
23          Mr. McCord.

24     CHAIR MOLINA: Okay. Members, before we go to Ms.  
25           Bernard, the Chair did state last week that

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1           we could go into the afternoon. I neglected  
2           to mention to you that I do have some other  
3           commitments this afternoon, so if there are  
4           no objections the Chair would like to just to  
5           up to 12:30 today.

6           And I know we've had a lot of  
7           information and I can tell by the looks of  
8           some of the faces of the Committee Members,  
9           yeah, I'm sure we can, we have a lot of work  
10          ahead of -- I mean before us.

11          So anyway I'd appreciate your  
12          indulgence in that matter so we'll terminate  
13          today's proceedings at 12:30.

14          Ms. Bernard?

15    COMMITTEE MEMBER BERNARD: I sense Terryl's  
16          frustration. It doesn't feel like we're  
17          getting anywhere, however, this is really  
18          important. Because the other things we're  
19          going to be able to come up some resolution  
20          on -- we just need to get the technicalities  
21          down, numbers and, and towers and whatever,  
22          lumens, wattage. I think those can be  
23          resolved fairly quickly and I see that  
24          happening by the next meeting for some of  
25          these.

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1                 But, but this is a loophole and this  
2                 gets back to how much light are we willing  
3                 to, to allow to be emitted whether it's an  
4                 exemption or not an exemption. I mean people  
5                 are going to be looking for the exemptions,  
6                 so the problem with having, as I suggested, a  
7                 changeover after eleven p.m. and as Mr.  
8                 McCord agreed is that's going to be really  
9                 hard. It's people forget. It's harder for  
10                people to do a changeover because it's just  
11                harder to remember.

12                If we just kept LPS all the time, then  
13                we wouldn't have that issue. I could live  
14                with certainly the hours of operation. I  
15                certainly could live with that if this  
16                particular component isn't used as the  
17                loophole to have lots of metal halide  
18                lighting all over the place that you can see  
19                from the beach and it affects the turtles.  
20                That's all.

21                So I think getting back to the way that  
22                was really written was strong. If we add HPS  
23                in, it weakens it and it changes everything.  
24                If we don't have a clause in here that  
25                specifies that these loopholes were

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1           exemptions need to not affect the beach,  
2           then, then these make invalid all the work  
3           we're doing.

4   CHAIR MOLINA: Thank you, Ms. Bernard. Mr. Chong,  
5           you --

6   COMMITTEE MEMBER CHONG: No, I just second the  
7           early quitting. I have a 1:30 flight, so --

8   CHAIR MOLINA: Okay. All right. Oh, we seem to be  
9           at an impasse here. The, the Chair would  
10          also be supportive of rewording it as their  
11          hours of operation because of the word  
12          business being rather vague, but I guess we  
13          can hammer out the issue of whether this, we  
14          should add LPS -- I mean, excuse me, HPS to  
15          the LPS. I guess it will be a matter that we  
16          can discuss at another time.

17           Dr. Altenberg?

18   COMMITTEE MEMBER ALTENBERG: Well, yeah, I suppose  
19          we do need to, I think, do some more research  
20          but under the very, the change that Rick  
21          Chong has proposed, if high pressure sodium  
22          is always allowed as an option, you know,  
23          based on what he was saying about the  
24          practices of the industry, low pressure  
25          sodium is never going to be used so that to

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1           allow HPS as an option would basically be the  
2           status quo. So anyway, are we going to take  
3           on additional one, Section 1(b) and 1(c)  
4           or --

5    CHAIR MOLINA: Yes, I'd like to --

6    COMMITTEE MEMBER ALTENBERG: Okay.

7    CHAIR MOLINA: -- at least get down through (d).

8           Okay. Moving on to (b), industrial --

9           I guess in the draft it reads "assembly or  
10          repair areas." The proposal from Mr. Chong  
11          is to add the word industrial to assembly, so  
12          it's "industrial assembly or repair areas."

13          Comments on this, Members?

14          Okay. Ms. Bernard?

15    COMMITTEE MEMBER BERNARD: I, I could see that very  
16          easily applying to a harbor, and again if, if  
17          we have a clause in here right under (a) or  
18          maybe under (d) that we're looking at  
19          protecting the beaches at night from direct  
20          lighting, I'd feel fine with all this.

21    CHAIR MOLINA: Okay. Comments from the Corporation  
22          Counsel to this additional word?

23    MR. GARNEAU: Again, I think that's fine but all  
24          these terms aren't defined, so, you know, I  
25          don't know whether it's an original ordinance

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1           that these came from, did they have  
2           definitions for the terms or, you know,  
3           because I don't know what does repair area  
4           mean. If a resort had a maintenance area  
5           near a beach, is that okay? I don't know.

6   ?: According to this.

7   MR. GARNEAU: So in, in general I think it's better  
8           to be even more specific or to define terms  
9           separately just depending on what your intent  
10          is.

11   CHAIR MOLINA: Okay. Dr. Altenberg?

12   COMMITTEE MEMBER ALTENBERG: I would propose that  
13          we look at the ordinance that this was  
14          adopted from and find out what the context  
15          was.

16   CHAIR MOLINA: Okay. So noted.

17           I think the suggestion of having the  
18          Hilo people share their ordinance with us  
19          will be very helpful in matters like this.

20           Any other comments from the Members  
21          with regards to Section 1 -- Section A.1(b)?

22           Okay. Moving on looking at (c), the  
23          draft reads "recreational facilities and  
24          other similar applications." The propose  
25          from Mr. Chong would have it worded as

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1           "recreational/sports facilities and other  
2           similar applications no later than eleven  
3           p.m."

4           Comments? Let's start with -- Okay.

5           I'll offer the comments first from the  
6           Members and then we'll go to our resource  
7           personnel. Ms. Tavares?

8 VICE CHAIR TAVARES: I'll wait until last, Mr.  
9           Chair.

10 CHAIR MOLINA: Okay. Mr. McCord, not at this time.  
11           Mr. Maberry?

12 COMMITTEE MEMBER MABERRY: No, sir.

13 CHAIR MOLINA: Ms. Bernard, not at this time. And  
14           Mr. Altenberg.

15           Okay. Let's go to Mr. Nakao from  
16           Public Works.

17 MR. NAKAO: I had a concern about temporary outdoor  
18           events, you know, things like Taste of  
19           Lahaina and things like that. I mean should  
20           those type of events be exempted from this  
21           ordinance?

22 CHAIR MOLINA: Committee members? Okay. We'll go  
23           first to Ms. Bernard followed by Dr.  
24           Altenberg.

25 COMMITTEE MEMBER BERNARD: I'll just reiterate what

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1           I said earlier: Putting that clause in here  
2           about, about the beach and the temporary  
3           event, I wouldn't have a problem with.

4    CHAIR MOLINA: Okay. Dr. Altenberg?

5    COMMITTEE MEMBER ALTENBERG: Maybe you could  
6           describe more what is the taste of Lahaina,  
7           where is it, what kind of field is it set up?  
8           Describe the circumstances.

9    MR. NAKAO: Well, for any type of outdoor event,  
10           not necessarily only the Taste of Lahaina but  
11           maybe even like the County Fair, for example,  
12           things like that. I mean, you know, the  
13           permits on those things are so fast-track  
14           that by the time we even go out there and we  
15           even write anything up, they're gone, they're  
16           packing up the next, you know, by the end of  
17           the weekend, so there's really no way of  
18           enforcing any of it anyway.

19   CHAIR MOLINA: Okay. Dr. Altenberg followed by Mr.  
20           Maberry.

21   COMMITTEE MEMBER MABERRY: They don't usually go on  
22           beyond eleven --

23   CHAIR MOLINA: Excuse me. I'm sorry. Dr.  
24           Altenberg first.

25   COMMITTEE MEMBER MABERRY: Oh, I apologize.

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1 COMMITTEE MEMBER ALTENBERG: I guess it would seem  
2 to me that those are areas where color  
3 rendition is needed for the event and so that  
4 those should be accepted from the low  
5 pressure sodium requirement, and so how, how  
6 would we describe those kind of events, I  
7 mean outdoor sales or dining?

8 One, let me share one thought that I  
9 had which is, you know, a place like Front  
10 Street, it's a, it's an area where  
11 pedestrians are engaged in night-time  
12 activity throughout the entire district. And  
13 some places, for example, San Diego has an  
14 historic district which it has allowed high  
15 pressure sodium to, to be used in, and so the  
16 idea of something like a pedestrian, a  
17 night-time pedestrian business district  
18 designation or an area that is continually  
19 used and where people walk around at night as  
20 part of their activities would be appropriate  
21 for, for having color rendition. I would --  
22 Any comments from anybody here?

23 CHAIR MOLINA: Okay. Go ahead. We'll start with  
24 Mr. Chong followed by Mr. George. And I know  
25 Mr. Maberry is waiting to ask a question so

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1           go ahead, Mr. Chong.

2    COMMITTEE MEMBER CHONG: Just a little further on  
3           that same thought and this is a question for  
4           Hannah. Are there specific sides of the  
5           island, beaches on the island that the  
6           turtles are at, like are the turtles at Front  
7           Street? And, and this is just for my own  
8           clarification. I've never gone to watch a  
9           turtle mate.

10   CHAIR MOLINA: Okay. All right. I'd prefer that,  
11           you know, you'd ask the question of Dr.  
12           Altenberg since he was, you know, asking the  
13           question.

14   COMMITTEE MEMBER CHONG: Okay.

15   CHAIR MOLINA: But go ahead, Dr. Altenberg, and you  
16           can respond. If you want to yield it to  
17           Hannah, okay.

18   COMMITTEE MEMBER ALTENBERG: I said what I said.

19   COMMITTEE MEMBER BERNARD: Yes, a green sea turtle  
20           nested not last summer but the summer before  
21           right off of Front Street. I mean it was on  
22           the beach behind Front Seat but in the darker  
23           area just past 505 Front Street, just past  
24           505, a dark area.

25           The turtles nest in dark areas so in

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1           Kihei, the last dark beach there, Kalia and  
2           Makena. And what we're seeing is -- And  
3           Analoa (\_\_\_\_) up north. What we're seeing  
4           is the more that we look, the more nesting  
5           habitat we're finding where there is darkness  
6           so if we do reduce the lighting, we might see  
7           increased nesting habitat.

8           But yes, they do, they do nest right  
9           off of Front Street. At least one individual  
10          did. Whether that's normal and it's going to  
11          continue happening with that female and her  
12          young remains to be seen, but, yes.

13         CHAIR MOLINA: Thank you, Mr. Chong. Mr. George?

14         MR. GEORGE: Yes, Bill George. I'm, I'm going back  
15          to the, it's the sea, we're talking about  
16          recreational facilities.

17           As an example, the Hula Bowl just had,  
18          just completed. My house is -- has direct  
19          line of site with the Hula Bowl and the  
20          lights were on all night because there was  
21          people there working all night, so are we  
22          going to say they have to close by a certain  
23          time or can the workers work by that light?  
24          That would be something to think about.

25         CHAIR MOLINA: Okay. Dr. Altenberg?

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1 COMMITTEE MEMBER ALTENBERG: That is dealt with  
2 under specific uses where the current draft  
3 says one hour after the end of the event the  
4 lights can still be on, so that, that's not  
5 an issue of -- In other words, this basically  
6 exempts sports areas, sports recreational  
7 facilities from having, from having to use  
8 low pressure sodium, period, and not just  
9 during certain hours.

10 Later on, it says that the lights that  
11 they do have there can't stay on, you know,  
12 past a certain time. So that's a different  
13 sort of issue.

14 CHAIR MOLINA: Okay. Mr. George?

15 MR. GEORGE: Yes, Bill George again. This was in  
16 reference to Richard Chong's saying  
17 recreational sports facilities and other  
18 similar applications no later than eleven  
19 p.m. So they're having the metal halide  
20 lights on all night long, right? That's what  
21 I'm trying to get at. If, if you do adopt  
22 this new change form, it will change the  
23 situation.

24 COMMITTEE MEMBER CHONG: Yeah, I don't think that's  
25 a big issue. I don't think whoever the event

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1           is, if it's the Hula Bowl if they have to  
2           work a couple extra nights because they can't  
3           turn on their lights past eleven p.m., I don't  
4           think that's an issue. People will make that  
5           adjustment.

6   CHAIR MOLINA: Thank you. Corporation Counsel,  
7           give us your opinion on this, this eleven  
8           p.m. limitation.

9   MR. GARNEAU: Well, again I think that has to be  
10          read together with what Dr. Altenberg said  
11          specific uses where they talk about -- It  
12          also says eleven p.m. in that section and  
13          then gives one hour after the game, so  
14          actually we go to twelve then.

15   COMMITTEE MEMBER BERNARD: Okay. Dr. Altenberg?

16   COMMITTEE MEMBER ALTENBERG: If we were to adopt  
17          Rick Chong's eleven p.m. cut off time, what  
18          that would mean when in conjunction with the  
19          other section of the ordinance would mean  
20          that, say the Hula Bowl, up to eleven p.m.  
21          they had all the regular lights on and then  
22          after eleven p.m. they had to go to low  
23          pressure sodium lamps, okay?

24           So that would require -- Normally they  
25          don't use low pressure sodium at all at

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1           sports facilities. That would require that  
2           the sports install low pressure sodium in  
3           addition to the regular lighting.

4           So in my mind, limiting the exemption  
5           from low pressure sodium to before eleven  
6           p.m. would be excessively burdensome and --  
7           so I, I wouldn't support adding that,  
8           supporting that eleven p.m. cut off on the  
9           low pressure sodium exemption.

10          CHAIR MOLINA: Okay. Thank you.

11          COMMITTEE MEMBER CHONG: I, I mean --

12          CHAIR MOLINA: Mr. Chong?

13          COMMITTEE MEMBER CHONG: Eleven p.m. is the cut off  
14           number time period for the Big Island and I  
15           don't think anybody on the Big Island had a  
16           problem with that, that time limit on  
17           recreational sports facilities, and that was  
18           a compromise between astronomers and the need  
19           of the recreation community.

20          CHAIR MOLINA: Okay. Corporation Counsel?

21          MR. GARNEAU: Well, I was just going to say that,  
22           you know, if you read them together, it's  
23           pretty much covered by the specific uses  
24           section in (d). It does talk about eleven  
25           p.m. but it also allows it to go longer if

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1           the game goes longer.

2   COMMITTEE MEMBER CHONG: That's fine. If, if it's  
3           redundant, then let's --

4   MR. GARNEAU: Yeah.

5   COMMITTEE MEMBER CHONG: -- (\_\_\_\_)

6   MR. GARNEAU: I think if we add it here as well,  
7           it, they're in conflict and they may have  
8           to -- they may think they need both low  
9           pressure, which is not the intent. So I  
10          think it's better just to leave it out of  
11          that earlier section since it's covered  
12          later.

13   COMMITTEE MEMBER CHONG: Thank you.

14   MR. GARNEAU: Thank you.

15   CHAIR MOLINA: Ms. Bernard, did you have --  
16          Okay. We're down, let's move down to  
17          any other comments on letter (c)?

18          Okay. Moving down to letter (d),  
19          "advertising and other signs," so it appears  
20          there's no change there.

21          Any comments? Ms. Bernard?

22   COMMITTEE MEMBER BERNARD: Again, not visible from  
23          the beach.

24   CHAIR MOLINA: Okay. All righty. Members, would  
25          you like to take on the last portion, Number

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1           2, are you up to it? We have ten minutes

2           more before -- Mr. Hanzawa has a comment?

3    MR. HANZAWA: Mr. Chairman, I'd like to revisit the  
4           original paragraph of 1, which I feel is very  
5           clumsy and it is dramatically incorrect.

6    CHAIR MOLINA: Okay. Can you re --

7    MR. HANZAWA: That's --

8    CHAIR MOLINA: In areas where color?

9    MR. HANZAWA: Yes, that's correct.

10   CHAIR MOLINA: Okay.

11   MR. HANZAWA: In areas where color rendition is  
12           needed to preserve the effectiveness of the  
13           activity, LPS or, and for HPS lamps are not  
14           required. And somebody in the future when  
15           reading this might not clearly understand. I  
16           would like to have that revised.

17    CHAIR MOLINA: For more clarity?

18    MR. HANZAWA: For more clarity. One recommendation  
19           that I would have would be for it to read  
20           that the provisions of this section shall not  
21           be applicable to the area that says below  
22           where color rendition is needed except as  
23           noted.

24    CHAIR MOLINA: Okay. The provisions of this area  
25           is not --

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1 MR. HANZAWA: Of this section.

2 CHAIR MOLINA: Of this section --

3 MR. HANZAWA: Shall not be applicable to the areas  
4 listed below where color rendition is needed  
5 except as noted.

6 CHAIR MOLINA: Okay. Any comments to this  
7 proposal, Members? Okay. Oh, sorry. We  
8 have Mr. Nakao from Public Works.

9 MR. NAKAO: Greg Nakao, Public Works. But then I  
10 think we would have to have a pretty  
11 extensive list on this thing to catch all the  
12 different options.

13 CHAIR MOLINA: Mr. Hanzawa?

14 MR. HANZAWA: Well, the remainder of the listing  
15 from (a) to (d) would be as discussed or  
16 remain the same.

17 CHAIR MOLINA: Okay. We'll take that suggestion  
18 under consideration.

19 Okay. Members, at this point I think  
20 we've had a lot for today -- Mr. George?

21 MR. GEORGE: Bill George. In my -- I know we were  
22 going over Rick Chong's suggested  
23 modifications, but in, in my letter that I  
24 sent in, it, it proposed an (e) under that as  
25 a life safety security.

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1                   As an example, the harbor areas. Are  
2                   we going to talk at all about harbor areas at  
3                   a certain time or are we going to turn the  
4                   lighting off where the workers are or, you  
5                   know, people walking through the cruise  
6                   boats? So that's the reason that I put that  
7                   life safety and security, I proposed an (e)  
8                   to that.

9   CHAIR MOLINA: Okay. Members, we can discuss that  
10                  now if it's the pleasure of the body but I  
11                  know we could get into a longer drawn-out  
12                  discussion on it. So my suggestion is we can  
13                  wait until the next meeting to bring this up.  
14                  I think this is a good, interesting proposal  
15                  from Mr. George.

16                  So with that, are there any  
17                  announcements at this point or any other  
18                  discussion? Ms. Bernard?

19   COMMITTEE MEMBER BERNARD: Yes, I just wanted to  
20                  find out if you will be able to proceed with  
21                  possibly scheduling someone from the Big  
22                  Island to share their --

23   CHAIR MOLINA: Okay. I'm -- Gary will be e-mailing  
24                  or calling everybody to let --

25   COMMITTEE MEMBER BERNARD: That would be helpful.

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1 CHAIR MOLINA: -- let us know as far as if they can  
2 come to our next meeting which, for the  
3 record, is scheduled for -- I want to make  
4 sure I get everything right.

5 COMMITTEE MEMBER McCORD: Mr. Chair?

6 CHAIR MOLINA: -- Wednesday, February 20th at ten  
7 a.m. here in the Council Chambers. Mr.  
8 McCord?

9 COMMITTEE MEMBER McCORD: Is there a low pressure  
10 sodium installed somewhere on Maui that we  
11 could go that would only have the low  
12 pressure sodium?

13 CHAIR MOLINA: Maybe Mr. George, I know Mr. George  
14 mentioned earlier he could help us set up a  
15 demonstration.

16 Mr. George, would you want to comment  
17 to -- make a comment to Mr. McCord on that?

18 COMMITTEE MEMBER McCORD: There is none at the  
19 moment.

20 MR. GEORGE: Yes, this is Bill George. To my  
21 knowledge in speaking to all the lighting  
22 people, the people that sell light bulbs  
23 because it took me a while to get this  
24 fixture. I had to go to Kona to get it. And  
25 even then, they had to send it over special

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1 because they weren't set up to do it.

2 There are no LPS fixtures that I know  
3 of in, in the Maui County other than I have  
4 not been up to the Observatory to see if they  
5 have up there. I have talked to people that  
6 work up there and they do say that they are  
7 required to have some LPS up there, so you  
8 might know better than I do about the  
9 Observatory.

10 CHAIR MOLINA: Okay. Mr. Hanzawa, any comments to  
11 Mr. McCord about low pressure sodium lights  
12 here on Maui, just from the County's  
13 perspective?

14 MR. HANZAWA: I personally am unaware of any  
15 installations. Mr. Randy Piltz, who I asked  
16 earlier he had installed any LPS fixtures in  
17 his years of business and has told me that he  
18 has not installed any.

19 CHAIR MOLINA: Okay. Thank you. Mr. Chong to be  
20 followed by Mr. Piltz.

21 COMMITTEE MEMBER CHONG: I would be surprised if  
22 you found any on Maui or in Honolulu or on  
23 Kauai, and the only reason it's in Kona is  
24 because we're required to use it. It's not  
25 the light source of choice by designers and

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1           businesses. It's required. I understand the  
2           astronomy value of it so that's why we use it  
3           on the Big Island.

4     CHAIR MOLINA: Okay. Mr. Piltz?

5     MR. PILTZ: Yes, Mr. Chairman, Randy Piltz. Also  
6           at one time Saint Anthony's High School had  
7           one fixture which was donated to them and  
8           they had it in a parking lot. I'm not sure  
9           if it's still there. I'll check on it and  
10          advise the committee.

11    CHAIR MOLINA: Okay. We have Dr. Wainscoat to be  
12          followed by Dr. Altenberg.

13    MR. WAINSCOAT: This is Richard Wainscoat. There  
14          are areas in Honolulu with extensive use of  
15          low pressure sodium, especially some of the  
16          military areas, and there are also some  
17          streets in Honolulu that have good shielded  
18          lights, the vast majority does.

19    CHAIR MOLINA: Okay. Dr. Altenberg?

20    COMMITTEE MEMBER ALTENBERG: I seem to recall that  
21          Breathe Lighting had one fixture very similar  
22          to the one you've got, an unshielded wall  
23          mount the low pressure sodium fixture, but  
24          again, that was about \$250 for sale.

25           And I had a conversation with Jonathan

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1           Star and -- who was interested in the issue  
2           of lighting, and he had said that he  
3           expressed an interest in installing a low  
4           pressure sodium lamp on his Wailuku Main  
5           Street property for the public to be able to  
6           see, but I have not gotten any follow up from  
7           Jonathan Star, but that was one offer that is  
8           still on the table as far as I know.

9     CHAIR MOLINA: Okay.

10    MR. SALDANA: Mr. Chair?

11    CHAIR MOLINA: I'm sorry. Hold on.

12    COMMITTEE MEMBER MABERRY: Mr. Chair, over here.

13       Look to the left.

14    CHAIR MOLINA: Oh, oh. I'm sorry. Gary?

15    MR. SALDANA: Thanks so much. I just wanted to ask  
16       one thing with regards to viewing low  
17       pressure sodium. In the memo that was  
18       referenced about the low pressure sodium and  
19       the staff from Hawaii coming over, that was a  
20       five year old letter. And subsequently about  
21       a week ago I talked with the same gentleman,  
22       Lyman Jakarta, who actually wrote the Hawaii  
23       ordinance.

24           And he indicated at that time that he,  
25           he has -- because of time constraints and

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1           responsibilities, he, he would have a hard  
2           time coming over here; however, he did extend  
3           an invitation to the subcommittee and that is  
4           something that the Chair is pursuing  
5           especially since, especially since there  
6           doesn't seem to be any LPS here that might be  
7           to our advantage to, or, or send  
8           representatives from the subcommittee over  
9           there to take a look at those and report  
10           back.

11           That might be an option to consider as  
12           well, but that is at the discretion of the  
13           Chair of, of the entire Counsel so we would  
14           have to defer to him for that.

15   CHAIR MOLINA: Okay. Could I get an opinion from  
16           Corporation Counsel? If we were to send  
17           representatives to the neighbor island,  
18           Hawaii, that would be no more than two  
19           members of the subcommittee?

20   MR. GARNEAU: Unless you wanted to notice it and  
21           treat it like, you know, a normal meeting.

22   CHAIR MOLINA: Okay. So if we did have a regular  
23           meeting, we'd have to post it and we'd have  
24           to have a minimum of four people to establish  
25           quorum?

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1 MR. GARNEAU: That's right.

2 CHAIR MOLINA: Okay. All right. Well, that's -- I  
3 have been looking into that option.

4 VICE CHAIR TAVARES: Does it have to be noticed on  
5 the island of Hawaii?

6 CHAIR MOLINA: Yes.

7 VICE CHAIR TAVARES: Both Hawaii and Maui then?

8 CHAIR MOLINA: Okay. So with that, if there is no  
9 other announcements at this point the next  
10 scheduled meeting is --

11 VICE CHAIR TAVARES: Sir?

12 CHAIR MOLINA: Oh, I'm sorry. Go ahead.

13 VICE CHAIR TAVARES: A question about your  
14 scheduled meeting --

15 CHAIR MOLINA: Right.

16 VICE CHAIR TAVARES: -- it's at nine -- it's at ten  
17 o'clock?

18 CHAIR MOLINA: Ten o'clock. Now, I am entertaining  
19 suggestions for nine o'clock. I, that's fine  
20 with me. That seems to be the consensus of  
21 the members.

22 Gary, has that been posted as ten  
23 o'clock already or we haven't posted it?

24 MR. GARNEAU: We haven't, haven't posted it --

25 CHAIR MOLINA: Okay.

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1 MR. GARNEAU: -- as of yet, but all we need to do  
2 is do a press release and then -- We're ahead  
3 of our posting schedule so once we post it,  
4 that will be fine.

5 CHAIR MOLINA: Okay. So for the resource persons'  
6 information, we're going to -- we will be  
7 starting at nine o'clock on February 20th,  
8 Wednesday, okay?

9 With that -- Ms. Vencl?

10 MS. VENCL: I just had a question about the site  
11 visit on the Big Island. Will, will resource  
12 people be able to go to that if they choose  
13 to go?

14 CHAIR MOLINA: Maybe Corporation Counsel, if you'd  
15 like to comment on that?

16 MR. GARNEAU: It would be just like any other  
17 meeting, so the public could be present.

18 MS. VENCL: Okay.

19 CHAIR MOLINA: So you would be, you would be  
20 allowed to come, okay?

21 Okay. With that, are there any other  
22 announcements?

23 VICE CHAIR TAVARES: (\_\_\_\_)

24 CHAIR MOLINA: For what? It is nine o'clock, I'm  
25 sorry. I didn't state that. I, I just

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1           assumed looking at everybody nodding their  
2           heads. Okay. I'm sorry. Yes, nine o'clock,  
3           February 20th.

4           Okay. Thank you for your patience. We  
5           had a -- We covered -- We had a lot of  
6           interesting discussion and as you can see,  
7           we've got a lot of work ahead of us, so  
8           anything that happens between now and the  
9           next meeting, please keep myself or Mr.  
10          Saldana informed as to any additional  
11          recommendations you would like to make prior  
12          to the next meeting.

13           This meeting is adjourned. (Gavel.)

14          COUNCIL MEMBERS VOICED NO OBJECTIONS.

15          ACTION: DEFER pending further discussion.

16          ADJOURNED: 12:37 p.m.

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1                   C E R T I F I C A T E

2                   STATE OF HAWAII                 )

3   )                   SS.

4                   CITY AND COUNTY OF MAUI)

5

6                   I, Mary Anne Young, Certified Shorthand  
7                   Reporter for the State of Hawaii, hereby  
8                   certify that the proceedings were taken down  
9                   by me in machine shorthand and was thereafter  
10                  reduced to typewritten form under my  
11                  supervision; that the foregoing represents to  
12                  the best of my ability a true and correct  
13                  transcript of the proceedings had in the  
14                  foregoing matter.

15                  I further certify that I am not attorney  
16                  for any of the parties hereto, nor in any way  
17                  concerned with the cause.

18                  DATED this 9th day of March, 2002, in  
19                  Honolulu, Hawaii.

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23                  Mary Anne Young  
24                  Hawaii CSR 369, RPR  
25                  Notary Public for Hawaii  
                        My Commission Expires: 9/2002

