

MINUTES

PUBLIC WORKS / PARKS & RECREATION COMMITTEE

October 17, 2018

A meeting of the Public Works / Parks & Recreation Committee of the Council of the County of Kaua'i, State of Hawai'i, was called to order by Ross Kagawa, Chair, at the Council Chambers, 4396 Rice Street, Suite 201, Lihu'e, Kaua'i, on Wednesday, October 17, 2018, at 8:30 a.m., after which the following Members answered the call of the roll:

Honorable Arthur Brun
Honorable Mason K. Chock
Honorable Arryl Kaneshiro
Honorable JoAnn A. Yukimura (*present at 8:33 a.m.*)
Honorable Ross Kagawa
Honorable Derek S.K. Kawakami, Ex-Officio Member
Honorable Mel Rapozo, Ex-Officio Member

The Committee proceeded on its agenda items as follows:

Bill No. 2612

A BILL FOR AN ORDINANCE TO AMEND CHAPTER 14, KAUAI COUNTY CODE 1987, AS AMENDED, RELATING TO THE PLUMBING CODE (This item was deferred.)

Committee Chair Kagawa: Before I ask for a motion, I have spent quite a bit of time trying to be a referee. We have disagreements between two (2) unions: the Laborers Union and the Plumbing Union. I think if you hear both sides of the arguments, you could say that you have two (2) people who have legitimate concerns and we wanted to tackle this item today; however, the Plumbing Union has a national conference in New Orleans and could not be rescheduled, so they asked for a deferral, and based on our calendar, the earliest date that we can have a deferral to committee would be November 21st. Since I tried to be a referee to work out what direction I wanted this committee to move on, I felt that it would be best if we had both unions here to present to all members their concerns. Let us let the body as a whole, whether it is this Council or the next Council, decide as to which side they want to take, because it is about picking sides on this issue. I think when you talk to the State legislators, it is not uncommon for these two sectors to have disagreements in State law as well. I think it is another time where they have disagreements based on the nature of the industry. We will defer to November 21st and as the Committee Chair, I recommend that we tackle this item that way. I think it would be best that all members hear both sides and come up with their best decision on this item. With that, any discussion?

(Councilmember Yukimura was noted as present.)

Councilmember Kaneshiro moved to defer Bill No. 2612, seconded by Councilmember Brun, and unanimously carried.

Committee Chair Kagawa: Next item, please.

Bill No. 2710, Draft 1 **A BILL FOR AN ORDINANCE AMENDING CHAPTER 12, ARTICLE 6, KAUAI COUNTY CODE 1987, AS AMENDED, RELATING TO THE ENERGY CODE (Amended to Draft 2; this item was Deferred to November 21, 2018.)**

Councilmember Kaneshiro moved to approve Bill No. 2710, Draft 1, seconded by Councilmember Brun.

Councilmember Kaneshiro moved to amend Bill No. 2710, Draft 1, as circulated, and as shown in the Floor Amendment, which is attached hereto as Attachment 1, seconded by Councilmember Brun.

Councilmember Kaneshiro: This is not my amendment, actually; it is by request.

Committee Chair Kagawa: The requester would be myself. Being that I am the Committee Chair, it is our procedure that we have another member introduce amendments for the chairs of committees. I want to thank Aida Kawamura. We spent a lot of time on this Energy Code and we had a working group of our own with the Contractors Association of Kaua'i (CAK) and other members of the local construction industry. There is a lot of concern about the adoption of the Energy Code as recommended by the State in totality. It does not help that the City & County does not go through this process and it does not help that Maui and Hawai'i Island also does not go through this process. The word is that they are waiting for us and they want to see what kind of amendments we do, because if you do not do any amendments, the State Energy Code gets adopted in full and that would be two (2) years from the time when the State first adopts it and Doug folks can correct me later if I am wrong. We have a two-year window to make amendments that fits each County and if you do not make any amendments, then you accept the State's adoption in totality. I met with some members of the Contractors Association and some local contractors from different segments and I still have more to meet with. At this time, I feel like we need to adopt whatever amendments we can and pass and improve Kaua'i County Council's Energy Code and perhaps it may be up to the next Council to decide whether further amendments need to be made, but it is a very difficult because it is very complicated, especially for a layperson. I think for Doug and Leo, they work with permitting and those such things daily so it may be easier for them to understand every aspect, but even with the working group that we had, it was very difficult for them to understand the impacts. I think what could help is better education between the Building Division and these groups, because I do not think it is my job to go and explain things that they are confused about. I think it is your job. The Energy Code smells good and feels great, but really, what are the cost impacts? Is that a big question mark that I need to guess? Is it for the contractors to say, "At least ten thousand dollars (\$10,000)"? Is it for the Building Division to say, "No, only

one thousand dollars (\$1,000)”? What is the correct answer? Is it one thousand dollars (\$1,000), ten thousand dollars (\$10,000), or one hundred thousand dollars (\$100,000)? It is very difficult. I hate that I was put in this situation to do the communication with the local contractors and the Contractors Association of Kaua'i. I think it is Building Division's job, but we do what we can. If a bill comes before us and the work is not done, then we have to do the work. We came up with our best solution. The Building Division may not like it and you will see it in the amendments that what I have is recommendations from not me, but from the working group that we had. A lot of it dealt with uncertainties that they had in the Energy Code and that they felt that it may have had significant cost impacts to the local families that are struggling to build, fix, and repair homes. They did not want to see adding to our affordable housing crisis, and instead, what they offered in a lot of cases was saying that we recommend changes, but not mandate. So there is a big difference; when you mandate, you force, and when you recommend, you give homeowners options. If they have the money...Councilmember Yukimura has an electric car and she probably has more money than me, but I would have an electric car if I could, but I cannot afford it. It is choices that we have with money that we have. I am still paying for my two (2) children's college loans. Maybe she is done with that...I do not know. We are all in different places in our lives and when you have choices, you give the consumer the choice to buy the Costco chicken or they can go to Kentucky Fried Chicken. You have choices based on how much money you have. I think that is our job; our job is to be flexible for all of our taxpayers. Again, this Energy Code feels good and tastes great, but I do not know what the costs is and I am concerned. I think I explained my amendment. We can go through each one. Can we put it up so that we can have Doug and Leo comment if possible? Okay, I guess our projector is broken, so I will just go through...do you have a question before I explain?

Councilmember Yukimura: Yes, I wanted to know if the Building Division has been able to...

Committee Chair Kagawa: I gave them a copy right now and they can answer.

Councilmember Yukimura: In terms of cost calculations and stuff...

Committee Chair Kagawa: I am not interested in having cost calculations. They already said that the whole impact is one thousand dollars (\$1,000), but I do not believe that number is accurate. If you believe their cost calculations are important, then you can ask for them, but I will have members vote on whether they agree with me or whether they agree with you.

Councilmember Yukimura: Well, I think what we want is we want a vetting of how each side determines their cost because I think we saw there were some assumptions in calculating costs that were not true and they were not understood.

Committee Chair Kagawa: Who was lying?

Councilmember Yukimura: I am sorry?

Committee Chair Kagawa: Who was lying? Who was not true?

Councilmember Yukimura: It is not about anybody lying; it is about...

Committee Chair Kagawa: You said that something was not true, what is not true?

Councilmember Yukimura: Excuse me, the assumptions that were made that led to the calculations may not have been true. I think that came out in our early conversations. I think we need to...the unfortunate thing is that people are...I believe this whole process did involve representatives of the different industries, but when you go off with one group and figure it out and you do not have everybody around the table, you cannot really look together at what people are including in their costs and what they are not including. It is not about who we believe; it is about how the calculations were arrived at. That is what we should see from either side.

Committee Chair Kagawa: So going forward, do you not agree with what I said that I think it is the Building Division's job to go and educate our local contractors and the Contractors Association instead of having them ask us to go and answer these questions. It would have been a lot easier if they had done that.

Councilmember Yukimura: I believe we should have them come forward because I believe they tried to work with the representatives...

Committee Chair Kagawa: Well, trying and actually doing it is two different things.

Councilmember Yukimura: I think they have actually done it and here we are assuming that they did not. I think there were many documents showing they had meetings, who was included, and if there was further need, which is why we deferred the bill, out of deference to you desire to look further at it...

Committee Chair Kagawa: My desire was based on the community telling me there were problems with the Energy Code.

Councilmember Yukimura: I think that was good, so it still...

Committee Chair Kagawa: I do not base it on my feeling...I am not an expert on the Energy Code, I work as a schoolteacher. I do not do anything based on the Energy Code.

Councilmember Yukimura: Council Vice Chair, all I am saying is that you need to show us how you calculated with the citizens, with the community, with the industry representatives, the costs, and we need to see how they calculated the costs so that we can have some idea of whether we are adding "apples and apples" or "oranges and oranges."

Committee Chair Kagawa: Well, you can decide whether you are adding “apples and apples” and every other member has the choice to decide it. I am not answering your questions. I have recommendations based on the working group that I have had and we have decided that some of the mandates will be turned into recommendations.

Councilmember Yukimura: Well, and the basis of that...

Committee Chair Kagawa: That is because they are professionals. I can give you their number and you can talk to them of why they recommend that.

Councilmember Yukimura: I think you need to show everybody their numbers and let us look at them, because I think...

Committee Chair Kagawa: We do not have any numbers because we have not implemented the Energy Code yet on Kaua‘i.

Councilmember Yukimura: But you do prospective calculations, which is how you arrive at whether the costs are too much or too little.

Committee Chair Kagawa: I can give you those numbers and you can do those calculations.

Councilmember Yukimura: Well, that is what I believe you should show to the public and to all of us...

Committee Chair Kagawa: I am saying that I can give you their phone numbers and you can do the calculations. You want the numbers, you are asking for the numbers.

Councilmember Yukimura: When you come forward with a position, then it is your responsibility to show and justify that position.

Committee Chair Kagawa: I am fine with my decision, my amendment, and my numbers. I am ready.

Councilmember Yukimura: If we want to vote with you, we need to understand...

Committee Chair Kagawa: You are speaking about yourself right now. Do not assume what other members may want or need. Go ahead.

Councilmember Chock: Mr. Chair, I think what we need to do is just hear from the other side...

Committee Chair Kagawa: I am trying to explain my amendment and she is saying what she wants to hear.

Councilmember Chock: But to go back and forth about what you are introducing as opposed to what she wants. So if we can move the conversation along, that is what my request would be.

Committee Chair Kagawa: Okay. Go ahead.

Councilmember Yukimura: Excuse me, I am asking you to share with us the calculations and assumptions that underlie what you are proposing.

Committee Chair Kagawa: Okay, let me explain our amendments one-by-one and if that does not satisfy you, then I am sorry, but I will not have all the answers that you may want. First, as we go through the pages, “door switches”—we are just taking out “and motel.” “Opaque and glass doors opening to the outdoors in hotel [and motel] sleeping units, guest suites, and time-share condominiums shall be provided with controls that disable the mechanical cooling or reset the cooling setpoint to 90° F or greater within five minutes of the door opening. Mechanical cooling may remain enabled if the outdoor air temperature is below the space temperature.” The second amendment is taking out “and motel” basically for the same thing. I believe that these are all housekeeping items and did not come from my working group. Number three, Sub-metering, “In new buildings with tenants, metering [shall] may be collected for the entire building and individually for each tenant occupying a space with three electrical circuits or more. Tenants shall have access to data collected for their space. A tenant is defined as ‘one who rents or leases from a landlord.’” Maybe the Building Division can give you what the cost of each metering would have been if you made it a “shall” versus a “may.” Again, I think the best way to approach logically thinking about the Energy Code and being more efficient—if you are rich, you have a lot of money and you can put all of the meters you want. This actually tells you that it is a good idea, but if you are struggling and every dollar counts, then perhaps let us leave it as “may” and the homeowner can decide what they want to do. That is all it is. It is nothing to do with any cost comparisons. The cost comparison may differ from contractor to contractor. Like I said, Doug folks said one thousand dollars (\$1,000) total, but the contractor said at least ten thousand dollars (\$10,000) total. What is the use of estimates when you have those kinds of numbers? It is not even close to each other. Roof replacement—instead of “shall,” we are saying “may include [at least two] any of the following: 1. Energy Star compliant roof covering, 2. Radiant barrier, 3. Attic ventilation via solar attic fans or ridge ventilation or gable ventilation.” So we took out “shall” and “at least two” regarding roof replacement. Again, we are just giving people the choices if they have money, if it is cost-efficient. If it is not cost-efficient, you can talk to your contractor. If it is not significantly more, then follow the Energy Code. Again, people have the choice instead of forcing them. Number five, “Electrical vehicle charger power”—“Electrical rough-in of a 30 amp circuit for future electrical vehicle charger [shall] may be installed in garage/carport area.” All we are saying is why mandate it? Not everybody is going to have an electric vehicle. “May.” Number six, Ceiling Fans—we are taking out “mandatory.” “A ceiling fan or ceiling fan rough-in [is] may be provided for bedrooms and the largest space that is not used as bedroom.” So basically, it is not much amendments. Believe it or not, the Contractors Association said that we have a lot more. It is too complicated and we need more time and have to meet with the air-conditioning people and other sectors and everybody is busy right

now, so it is hard to get everybody at the table. I think instead of criticizing the Contractors Association, let us praise them, because actually, they are doing work that should have been done by our County agencies. Any questions?

Councilmember Yukimura: You called the first two about taking out motels housekeeping, but how many motels are they on Kaua'i as a percentage?

Committee Chair Kagawa: Do we have Alexa? Let me ask Alexa, she might know. Just kidding.

Councilmember Yukimura: What is the rationale for taking out "motels"?

Committee Chair Kagawa: We have to ask the Administration. It is housekeeping.

Councilmember Yukimura: Can we have them come forward?

Committee Chair Kagawa: Sure. Are you done with questions for me and my working group?

Councilmember Yukimura: On the sub-metering...

Committee Chair Kagawa: We had Don Lutao in our working group and you folks recommended that we have Don and Don was on our working group.

Councilmember Yukimura: So in the new buildings with tenants, metering may be collected...

Committee Chair Kagawa: Sorry, the motel change is ours. I thought that was housekeeping. Why did we take that out? Do you know? Okay.

Councilmember Yukimura: Do you have an answer?

Committee Chair Kagawa: Yes, that was ours.

Councilmember Yukimura: What is the reason that you are recommending that it be taken out?

Committee Chair Kagawa: Actually, she said it came from Karen, from the Contractors Association and I believe that they said that motels do not have a lot of the amenities that the hotels do. Look at some of the motels just in Līhu'e and compare that to the Marriott. If that is not "apples and oranges," then I do not know what is.

Councilmember Yukimura: If they do not have as many amenities, that means that this will not be as much of a burden, right?

Committee Chair Kagawa: I will support the amendment.

Councilmember Chock: Mr. Chair, just a process question; so when talking to the other islands, the other counties, did they said that they wanted to initiate their own as well after seeing what we do or are they just going to go with the State?

Committee Chair Kagawa: I have heard that they have, especially on the (inaudible-ACN?) they are looking to Kaua'i and seeing what we come up with, because on the ACN, there is concern from O'ahu companies that are concerned about the Energy Code in totality, but I think they are waiting to see our amendments and see who they need to work with on O'ahu, because I think they do not want to just take full charge of taking this matter to the City Council, but I think they are waiting to see what this Council did because they heard that we were working on it, and then seeing whatever groups that had opposition to other parts of the code and approach it as a group. That is what I gathered.

Councilmember Chock: Is it correct that they would have until February?

Committee Chair Kagawa: I am not sure, we can ask Doug.

Councilmember Chock: Thank you.

Committee Chair Kagawa: Councilmember Yukimura.

Councilmember Yukimura: I am on sub-metering.

Committee Chair Kagawa: Okay.

Councilmember Yukimura: "In new buildings with tenants, metering [shall] may be collected for the entire building," so actually this means that someone building a multi-family dwelling or a hotel could just meter for the whole building rather than for individual units. What that means is then in order to allocate the energy cost to each unit, they would just take the whole and divide it up, which means the tenant has no control over their own electric bill, so that if their neighbor is just wasting energy or using a lot of energy, they are going to have to pay for it. To me, that seems like it would be hurting people who might not be able to pay the electric bills because they cannot control it. They might do everything possible to save electricity, but it does not matter if their neighbor or neighbors is just using electricity and then they have to pay for it because it is just divided by the units. If people are accountable for their own energy, so they have to pay for what they use, then they are more likely to not waste. It is like the feedback you get. If you had free water or really cheap water then you do not care, but if you start getting the bill for what you use, then you are more careful. This is something that I think would help everyone all around to require that you not just do the bill as a whole, but individual units, too. It is a fairer process and it keeps people more accountable in their energy use.

Committee Chair Kagawa: Again, the Contractors Association had other scenarios...they are not here today to tell you what scenarios they had, but they convinced me that leaving it optional is a better option in not affecting affordable

housing by making a rash decision with this energy bill. We can counter and argue with each other, all day on every one of our arguments...

Councilmember Yukimura: Please share some examples.

Councilmember Kaneshiro: I will share an example. For me, I am comfortable with this. I guess I can put this into terms that if somebody builds a ten thousand square feet (10,000 sq. ft.) industrial building and they split it into five (5) bays, based on this, I think the most likely thing you will have to do is put five (5) meters in each bay to meter electricity, but you do not know who your tenants are going to be. You may get a tenant that rents out the entire building, then you have five (5) meters when you only need one (1) or you may have a tenant that leases out three (3) of them and another with two (2) and you have all of these electrical meters. For me, I am comfortable with this. If a landowner has a building and they put in one (1) meter and they have all of these people in there and he thinks the electric bill is high, then they can go and install new meters based on the tenants they have. But for a person setting up a building to even know how many tenants they are going to have in the building, just that alone is difficult in itself. For me, I am okay with this. Ultimately, it is up to the landowner. If a tenant comes in and says, "I do not want to be on a meter with everybody else," then it is up to the landowner to take whatever steps necessary to either say, "That is the way it is going to be" or "let me try and change it." Again, it is giving people the option to do what they want, but I could see a situation where you do five (5) bays and you put in five (5) meters and you do not need all of the meters. For me, I am fine with this.

Committee Chair Kagawa: Again, it is flexibility and they can do it if they want to. Councilmember Kawakami.

Councilmember Kawakami: Thank you, Chair. For me personally, this is a tough one, but I do appreciate the example. We do have some commercial buildings where we have multiple tenants. The thing that I think we should consider is maybe taking some time to go and talk-story, because I do know that there is one example of an affordable housing project on Maui where they had just one (1) meter for the whole building and you had tenants that were working all day long, so they were not using any energy, and then you had people at home all day long, elderly people running their air-conditioning units. There was actually some reach out from these tenants saying, "Hey, I am hardly home, but yet, this is my electricity bill." So there are some pros and cons to this on both ends, but I think that we should take some time to consider the unintended consequences on this, because we are actually trying to encourage people to conserve energy, and if there is no incentive, we have seen past practice that people's behavior is just to go towards convenience. What I would hate to see is people just leaving their air-conditioners on all day because they know that it is not necessarily the more that I use, the more that I pay; it is just everybody here is going to pay. The classic example is all seven (7) of us at this table sharing one (1) bill at a restaurant; I am ordering a hamburger and fries and you are ordering a filet mignon, there is no equity in the payment of that bill. I think on this one, we should take some time because there are some serious unintended consequences.

Councilmember Yukimura: There are at least two (2) things to think about: if you install these things at the time of building versus retrofit, it is much cheaper and sometimes make a difference between feasible and not feasible. For example, that condominium that is right across from Safeway in Kapa'a, I am told was built so that the cost of energy was for the whole building and the tenants did not have control. If you wanted to go back in and retrofit all of the meters, it is extremely expensive, so it is better to do it at the beginning. As to Councilmember Kaneshiro's example, perhaps we should exempt it for industrial or commercial, but not for residential, because in residential, you have the situation as Councilmember Kawakami has mentioned of affordable housing or other...even if it is not in our definition of "affordable housing," it is still people who have to watch their budgets, and for them to have to pay the electrical costs of someone else just does not make sense from a standpoint of energy conservation or fairness.

Committee Chair Kagawa: What baffles me is how did the State Building Council not address this item with at least some documentation, "For this sub-metering, we had some discussion going on and we have this lightbulb on, there are two different arguments to this," but Councilmember Yukimura keeps on praising that the State Building Council really had a variety of people in their group, but yet leave it to the Kaua'i County Council to go and talk to the local contractors who say, "This sub-metering could really drive costs up, because in many cases it is not necessary to have individual meters for each unit," and then now it is like, "Maybe we should push amendments." The State Building Council, when they did it, they should have done all of the amendments and everything; not bring it here and us having to make chicken soup out of this thing.

Councilmember Yukimura: Chair, that is part of our job if something was missed to address it here and you have been trying to do that and we have all been trying to do that by trying to understand what is intended and what the impacts are of this wording. I think we should have them at the table right now...

Committee Chair Kagawa: We are going to, but you are still talking and you were still talking about that item...

Councilmember Yukimura: If we are talking about each issue at a time, it would be good to have them before we start evaluating or criticizing them. We should at least hear what their position is.

Committee Chair Kagawa: I think what was happening was that you were praising them and I was saying that they could have done more.

Councilmember Yukimura: I was just trying to remind us of what they reported.

Committee Chair Kagawa: Let us not praise them until we know for sure that they deserve praise. I am not at that point. What number are we on now? I am still trying to finish my amendment explanation here. Are we done with all? Okay. Let us have the Building Division up here.

There being no objections, the rules were suspended.

DOUGLAS HAIGH, Chief of the Building Division: Morning, Doug Haigh, Department of Public Works (DPW). Thank you for inviting us up here. I would like to comment on the proposed amendments, if that is appropriate.

Committee Chair Kagawa: Yes.

Mr. Haigh: Okay. For the door switches, I have no real objections. For the first one, I do not really agree with the logic of it, because even on a motel, even though it is a smaller unit and a smaller type of facility, you still do not want guests opening their *lānai* windows with the air-conditioners going full blast. That is what this amendment is all about, is when people are at the facility, they open their *lānai* door and the air-conditioner is on full blast and they stay that way the whole time they are there. That is the key of this. So it is an energy savings which would actually be good for the motel owners. I do not feel really strong about it, but that is the concern there. The most sophisticated switching, the second item, I agree that it makes sense that for a motel which has less amenities, this would not necessarily be important.

Committee Chair Kagawa: Doug, if you heard me, I was saying look at the motels that are right in Lihū'e; is there even *lānai* and pools to leave your door open? There is none, right? Motels, right?

Mr. Haigh: Yes.

Committee Chair Kagawa: Look at the motel right by Garden Island Barbeque...there is no pool or *lānai*, right? I am just trying to stay with what the contractors has said, which is that the amenities are really different in hotels like the Marriott or other nice hotels than our motels as we know on Kaua'i, which are like houses, right?

Mr. Haigh: Yes. Like I prefaced, I do not have any real objections to those, but that would be the concern.

Committee Chair Kagawa: Any questions on those?

Councilmember Kawakami: Not if he does not have any objections. I just have concerns that in some of these smaller "mom and pop" motels, they have window unit air-conditioners; is there sort of a door switch device that can manage a window unit? I am not too sure.

Mr. Haigh: This would only apply to new construction.

Councilmember Kawakami: Oh, to new construction?

Mr. Haigh: Our code only applies to new construction, except for the roof replacement.

Committee Chair Kagawa: What about remodeling?

Mr. Haigh: For remodeling, if you are changing something in the area of where the issues are, you would have to change it. Say you were just going to put in new doors, then you are not getting into the electrical system, so then you would have to put in doors that are appropriate for the Energy Code, but you would not have to make the other upgrades associated with the Energy Code.

Councilmember Kawakami: So if I am going to convert my motels from those type of window unit air-conditioners to central and split system, then these would trigger in the required changes?

Mr. Haigh: Yes, well, it depends. Basically, we would be saying that you would be changing from...what our struggle is here is defining window units as an air-conditioning unit as compared to split system central air and we are struggling on this elsewhere in our code and what we are working on. Typically, we have accepted window units as more like a piece of furniture, so it is not an air-conditioning system because it is plugged in, it can come in and out very easily. Therefore, especially in residential at this point, we are not regulating it like we would regulate split systems. That is kind of a gray area that we are actually struggling with right now. Say if you had an unconditioned space and you were going to condition it, then the code requires you to insulate. Now, we are working on an amendment to address residential installation to split systems. We were hoping to have it to you folks last week and we hope to have it to you this week because that is a big issue right now that is going on and we are working on.

Committee Chair Kagawa: Council Chair Rapozo.

Council Chair Rapozo: Thank you. Thanks, Doug. Do you not agree that we need to un-gray that area?

Mr. Haigh: Absolutely.

Council Chair Rapozo: If window units are excluded, then we need to state that in this code, because you do not want to leave it up to your interpretation of what it is. I look at it differently—I think an air-conditioning window unit is an air-conditioning system because it is intended to cool. Slightly leaving the door open when you are blowing the air-conditioning unit, you are wasting energy. I agree with you, because if this passes, then any motel or any multi-family that wanted to install a window unit would probably be prohibited because I do not see how you control the window unit to the door. You would be forcing them to put in a split system, which would drive up the cost tremendously right there. You can buy a window unit for a little room for a couple hundred of dollars versus central.

Mr. Haigh: Philosophically, if there is a separate circuit for the window unit, then I would say it would be considered permanent air-conditioning installation. But if it is not a separate circuit and it is on the general circuit, then you could just plug it in anytime. To me, that is what I would use to define it and that is something that we need to work on in our house and come up

with clarification. Thank you for bringing that up. I think in the amendment that we are working on, we will go back and look at that issue and try to clearly define how we want to deal with window units.

Council Chair Rapozo: I do not want to get into passing a law that is going to give the central air-conditioning people the advantage over the window unit people. I do not think that is fair.

Mr. Haigh: Yes. Like I said, what I would tend to is if it requires a dedicated circuit, because some window units are two hundred twenty (220), then that should be considered an air-conditioning system.

Council Chair Rapozo: But if we are talking about a motel, we are typically about two hundred (200) to three hundred (300) square feet and you are not going to get a two hundred twenty (220), you are going to get a one hundred ten (110).

Mr. Haigh: Right.

Council Chair Rapozo: Thank you.

Committee Chair Kagawa: Councilmember Yukimura.

Councilmember Yukimura: So the amendments you refer to that you are working on, is that for this bill?

Mr. Haigh: It is for this bill and I really apologize—we had hoped to have gotten it to you last week. We are pretty much done, but we could not get it across the street yesterday. We are working on it. Just to give a little bit of background...maybe it would be best to wait until we bring it forward to discuss it. Basically, there is a lot of installation of split systems going on residential and that is unregulated and we are getting a lot of illegal electrical work associated with it, so that is why we are trying to get a handle on that.

Councilmember Yukimura: But that is a rationale for deferring approval of this bill, because you have some amendments that we have not looked at yet?

Mr. Haigh: Correct.

Councilmember Yukimura: Okay.

Mr. Haigh: I apologize for that.

Committee Chair Kagawa: Do not apologize, we have held it up here, but it is just getting a meeting with the contractors and their professionals, we rescheduled numerous times. It has just been difficult. I think on the contractors' side, it is hard to get them altogether during the day. Anyway, we deferred and now we have to defer because of you folks, it is all good.

Mr. Haigh: Leolynne has been working with the contractors doing a lot of research on the air-conditioning issue. I would like to address other issues.

Committee Chair Kagawa: There is confusion, so it would be better if you folks keep the dialog with them. Councilmember Yukimura.

Councilmember Yukimura: I am not real familiar with air-conditioning systems, but what I hear you saying is that if it is just a plug-in, it does not make sense to require that when the door is open that the air-conditioner goes off. That is basically what this provision is requiring, right?

Mr. Haigh: Yes.

Councilmember Yukimura: But if it is a central system or a split system...what is split system?

Mr. Haigh: Split system is not a central system, but it is a type of air-conditioning that will have a separate electrical circuit.

Councilmember Yukimura: So when you are installing a separate circuit, that would be the logical time to include this on/off system?

Mr. Haigh: Correct.

Councilmember Yukimura: This only applies to new buildings or new constructions, so it is not going to make our existing motels have to do anything, right?

Mr. Haigh: That is correct, that is how our codes work.

Councilmember Yukimura: Right, but it does mean that the motels that we have now may not be the motels of the future, there may be new and different kinds of...say as Līhu'e develops in its commercial areas, whether it is Rice Street or the areas that Grove Farm has for development, there may be different and new kinds of motels that pop-up and this would apply to them. If they can put it in the beginning, it can actually save the motel owner money, because the bills are not according to user.

Mr. Haigh: The intent is to save energy and energy costs.

Councilmember Yukimura: Okay. Thank you.

Committee Chair Kagawa: Go ahead.

Mr. Haigh: Okay. I have great concerns about using the word "may" in a Building Code. The intent of the Building Code is to give the minimum requirements for life, safety, and energy savings. If you put the word "may" there, it is pointless. There is no reason to have that language in the code. There are

lots of recommendations we can make to homeowners and there are lots of people out there making recommendations to homeowners. I do not think they need more recommendations, I think there are very few homeowners who actually read our codes. It is the contractors and the designers who read and use our codes. That is just a fundamental thing. If we want to use the word "may," then you should just delete the item from the code altogether; because it is not a code, it is a suggestion and our job is not to give suggestions, our job is to regulate.

Committee Chair Kagawa: Again, we had Don Lutao there in our working group and he was okay with "may" but again you folks disagree with each other.

Mr. Haigh: Yes. On the sub-metering specifically, this one was Hawai'i-introduced. Actually, Howard Wiig, our State Energy Coordinator, this has been something near and dear to his heart for many years. He cites numerous studies that show that when people see their bills and pay their bills, they are much more likely to conserve energy and not waste energy. I do want to clarify that every section in this code that has a "C" in front of it, that is commercial. It does not apply to residential. So this part is really aimed at shopping centers. It is kind of the type of places and office buildings. Say you are doing an office building and you have multiple tenants, if you have one (1) electric bill, then there is little incentive for, as other Councilmembers discussed. The justification of this is that it is just for commercial and the intent is to have the people who use the energy to see the bill; therefore, as mentioned, people who are saving energy are not punished by people who are not saving energy, and then everybody will be encouraged to save energy and it is only for new construction. There is no standard cost for what this is because there is no standard building, so it is an additional cost, but it is certainly a lot less expensive to put it during construction than to try to put it in after construction. Even nowadays, with the technologies out there, it is not even that hard necessarily in most cases to do it after construction, too, because there is newer technology for sub-metering. In doing their construction, it is quite easy to do.

Committee Chair Kagawa: Of course we knew what "C" was. We had Don Lutao as a working group member and I recall now and I should have recalled when Councilmember Yukimura asked the question was that he painted that picture of having what Councilmember Kaneshiro said: three (3) separate rooms rented by the same person, why do you need three (3) separate meters? There is no flexibility when you require and mandate it individually for each tenant. Like I said, when they build it, they will build it as different rooms, but if it is the same person renting it, then you do not need it. You do not need all three (3) to be metered. It could be a small room even in some cases.

Mr. Haigh: We did try to control that and it is one of the things that we struggled with, was do we put a square footage minimum on the tenant's base? What we came up with is three (3) electrical circuits or more. If you have a kiosk at the shopping center, you do not need a sub-meter because you are not going to have three (3) electrical circuits most likely, so that is kind of how we tried to deal with the issue. When it is just small tenants basis, it may not make sense and we could not really come up with a square footage that was right, but the electricians

who were part of our team said, "Why do we not use the circuits?" Typically, that would be a better way to manage it, so if there are three (3) or more electrical circuits, then it requires a sub-metering. If you have small spaces that have only one (1) and two (2) circuits, because typically, a small space would have one (1) circuit for plugs and one (1) circuit for lights. Some of your commercial spaces will have central air, so you are not providing separate air-conditioning for each space. That is how we dealt with that issue to try to make sure we were not being over-regulatory and forcing this requirement on spaces where it really did not make sense. That is what we tried to do.

Committee Chair Kagawa: Councilmember Yukimura.

Councilmember Yukimura: If this applies just to commercial, then that building across from Safeway would not apply to it?

Mr. Haigh: That is an R-2, so that would be residential.

Councilmember Yukimura: It seems that there would be a need where there are a lot of tenants to do that and that it would be advisable to do that, even more for that kind than commercial. Was there a reason that you decided not to?

Mr. Haigh: I think this is the first step, so we just addressed the commercial side with this. On the residential side, we were really focusing on the tropical home and putting all of our attention there, trying to get that correct.

Councilmember Yukimura: The tropical home assumes that it is single-family...

Mr. Haigh: Yes, so I think this is the first step. You are correct—I think most condominiums are doing separate meters, but it is not an Energy Code requirement at this time.

Councilmember Yukimura: Are you saying that it is a rare thing that condominiums or multi-family, multi-unit residential building would not be individually metered?

Mr. Haigh: I cannot answer that.

Councilmember Yukimura: Okay. Thank you.

Mr. Haigh: The next items, the roof replacement, this is...

Councilmember Yukimura: "May" and "shall."

Committee Chair Kagawa: I will change my amendment if you want it taken out, we can just take out the whole section.

Mr. Haigh: Yes, that would be better.

Committee Chair Kagawa: Okay.

Mr. Haigh: For the roof replacement one, we have been struggling with this. The current code requires that if you tear down your roof to a certain point, you have to add insulation and that is a big cost. We acknowledge that as a big cost. We are not quite like places on the mainland where you have real hot summers, real cold winters, so you are really losing a whole lot of energy, but we do...our main heat gain to our homes is through the roof. We did not want to give up entirely and just delete...we felt that requiring re-insulation per the national code was too much of a burden for the cost benefit, so we looked at low-cost alternatives and we really felt that what we came up with was a low-cost alternative, which would basically to provide the Energy Star compliant roof covering...that does limit choice... we are struggling right now with the Adolescent Treatment and Healing Center. We had a conflict between the roofing specified and it to be Energy Star and it was not Energy Star rated, so it changed to an Energy Star rating and we actually saved money because the roofing system that was specified was more expensive. It is a choice and it does limit your choice because there is a lot of Energy Star rated products, but not all are. If you go to some of the more...it is one that is not Energy Star rated, then you are going to have a much greater heat gain, so it would be better to have insulation. We felt it was a good compromise with a minimum cost impact to help out and Howard Wiig gives an example of a homeowner who has been calling and complained, "The guy reroofed my house and now my house is so hot." Because they just reroofed it and nobody is regulating that how it is supposed to be regulated and he did not get any insulation or Energy Star and all of a sudden he is getting this high heat gain through his roof and that is what happens. Then what happens is people by air-conditioning units. We are hoping that this would allow for a low-cost method of at least providing some heat reduction properties. To do an energy compliant roof covering, that is a choice of covering that you can choose. There are multiple products out there and they really are not that much more expensive. Then to add attic ventilation or ridge ventilation is another item that really is not a significant cost for your normal asphalt roof. It is easy to add ridge ventilation. We did not see this as a big cost item for the benefit that is gained. We feel this is good for the code and is good for the people of Kaua'i to have in the code. It is a relaxation of the current code, so that is why we support this. Again, if you do not want it, please just take it out and remove the requirement. Do not put "may" because "may" does not mean anything in our code. Any questions on that item?

Councilmember Kaneshiro: This is only for commercial buildings, right?

Mr. Haigh: That is correct. I am just surprised and I think I was going to not say this, but I guess I have to be honest—you missed the "R"...you have the same requirement in the "R" Section. So if you do not want it for commercial, you do not want it for residential, so you are probably going to want to take it out of the residential side also. We have the exact same language both for commercial and the residential side and I think it is just as important or even more important for residential. I think the reason why Don did not really emphasize that was because most people who reroof do not need to get building permits on the residential side. They are excluded from permits, therefore, they do not have to come

in. Technically, even though they do not have to get a permit, they are supposed to comply with the code. I think that is the reason why Don did not emphasize having it taken out on the residential side is because they are not coming in for permits anyhow.

Committee Chair Kagawa: Because he has over thirty (30) plus years' experience as your head, so he knows.

Mr. Haigh: Yes. So that was the reason and I remember now, Leo explained to me what she discussed with Don so that is what is on the residential side.

Committee Chair Kagawa: We relied on Don a lot. Councilmember Kawakami.

Councilmember Kawakami: Thank you, Chair. Thank you, Doug. We did include this in the residential...I was on the Council I think when we had this discussion the last time and it was a compromise because we were moving towards full insulation of a home. We did have that discussion that a majority of the heat in Hawai'i comes through the roof, so we did require this in the residential and it was a compromise. We said, "Okay, we will remove the requirement for full insulation," so I understand the importance of this and the history of it. Does this also include the requirement of new insulation for a commercial building as well or are we not requiring it and then just requiring this side? Is that the same track that is "apples to apples" with residential and commercial?

Mr. Haigh: Excuse me, can you repeat that?

Councilmember Kawakami: Okay, so when we did the residential, the original proposal was to require the full insulation of a home, so roof and walls, right?

Mr. Haigh: Correct.

Councilmember Kawakami: Then we had the back and forth discussion that in some cases, that is going to drive up the cost in construction, and really, the top priority is to insulate the roof, because that is where the heat is coming through.

Mr. Haigh: Yes.

Councilmember Kawakami: So I am just checking to see if that same application is being considered for this commercial.

Mr. Haigh: Okay, what we did to address that issue is with the new code, we came in with the tropical home, so it has changed a little bit, but for a tropical home, you are not required to have wall insulation. We put in our code...if a commercial structure is residential-like, then the tropical home requirements can apply to it. We get to smaller commercial structures that are the same basic type of construction as residential and they may not be putting in central air and that was our way of being able to deal with commercial structures, and then

that is a relaxation in the code. If you are building a smaller building and it is kind of a residential-like building and you are going to follow the tropical code requirements, then we will allow you to apply that to that commercial structure.

Councilmember Kawakami: What is a tropical home requirement? Give me some of the characteristics. Is it the roof? Landscaping?

Mr. Haigh: I believe we are now requiring R-13 roofing, a significant amount of ventilation, not more than half of the building is air-conditioned, it is not heated, it gets the right glazing...glazing applies to code, the lighting is going to be energy-efficient lighting, and the roof would be an R-13 insulation. In some instances, it might require R-19, but I believe that if it has ventilation and what not, it can go with the R-13. A key thing is allowing outside ventilation not less than fourteen percent (14%) of the floor you have to have equivalent ventilation and ceiling fans would be there. We also allow jalousie windows.

Councilmember Kawakami: Does CAK know that this is for commercial and that it does not apply to residential?

Committee Chair Kagawa: Yes, we had Don Lutao as our expert in my working group. Don understands this whole thing. He did work with Doug on the first go-around, but hearing some of the private contractors' concerns and hearing the Contractors Association's concerns, I think on some of the issues he felt that some of the mandates were too risky and that it did not allow flexibility. So he may have had a change of heart in some of the areas where originally he was firmly behind Doug. Just the reality, right?

Councilmember Yukimura: Doug, in focusing on the provision that we are looking at, which is applied to commercial roof replacement; in commercial roof replacement, a permit is required unlike a residential roof?

Mr. Haigh: Correct.

Councilmember Yukimura: That is a big thing to replace a roof. It is costly.

Mr. Haigh: Very expensive.

Councilmember Yukimura: So these requirements of Energy Star compliant roofing radiant barrier attic ventilation, are they very much more expensive?

Mr. Haigh: As I stated earlier, upgrading to an Energy Star roofing is not necessarily that much more expensive. Actually on the Adolescent Treatment and Healing Center, we saved money by going to the Energy Star product rather than the originally specified product and this is asphalt shingles type of system, so it depends.

Councilmember Yukimura: Right.

Mr. Haigh: More and more roofing products are out there that are Energy Star compliant.

Councilmember Yukimura: So these requirements might either save money or the incremental additional cost is not that much compared to what you have to pay for a roof replacement.

Mr. Haigh: Percentage-wise, I would say that you are certainly under ten percent (10%).

Councilmember Yukimura: Under ten percent (10%), okay. But the cost you save and the comfort you get from putting them in is like it may be...not having an air-conditioner would be significant.

Mr. Haigh: That is the justification for putting this in the code is we feel that the benefit exceeds the costs.

Councilmember Yukimura: You can actually pay off the upfront costs over a pretty short time period, the payback period is pretty short.

Mr. Haigh: Well, if you are air-conditioning. For comfort, you do not pay money. It is when you add the air-conditioning system and you are running the electrical for it that you are paying. If you have a home that is not air-conditioned and you do this, you do not really get payback because you are not saving money on energy because you are not air-conditioning, but you are more comfortable.

Councilmember Yukimura: First of all, we are talking about commercial, not residential.

Mr. Haigh: Okay, that is true.

Councilmember Yukimura: What you are doing is you are avoiding costs.

Mr. Haigh: Yes. I would say the same thing, like warehouses and what not may not be air-conditioned.

Councilmember Yukimura: Yes, okay. Then you also said that the provision that is in the Energy Code right now, proposed Energy Code, is a relaxation of current requirement?

Mr. Haigh: Yes, the current national code requires that if you reroof, teardown to a certain point, you have to add insulation.

Councilmember Yukimura: You have to add what?

Mr. Haigh: Insulation.

Councilmember Yukimura: And we are not requiring that?

Mr. Haigh: We are not requiring that, we are replacing that requirement with this requirement.

Councilmember Yukimura: Okay.

Mr. Haigh: It is a relaxation and a significant cost savings.

Councilmember Yukimura: Okay. Thank you.

Committee Chair Kagawa: Councilmember Chock.

Councilmember Chock: Just in terms of the amendments as well, I think you talked about this in previous meetings, but obviously one of the goals is safety consideration, are any of the amendments as it is being changed affect that? The option is here if you take it all out and the concern is if it hinders any safety consideration.

Mr. Haigh: No, really the intent, the vast majority of the Energy Code is not life-safety issues, but it is energy savings issues.

Councilmember Chock: Thank you.

Committee Chair Kagawa: Council Chair Rapozo.

Council Chair Rapozo: My question was answered.

Committee Chair Kagawa: Okay. Next item.

Mr. Haigh: I have no objections to this because when we adopted the 2017 National Energy Code (NEC), that included providing the requirement for 20-amp circuit in the garage. Part of that was to satisfy future use of charging vehicles, so I have no objection of taking the requirement out. Again, I just say do not have the word "may" and totally delete this section. I think we are taking care of the people with the electrical code and the provision that was added in the electrical code. It is only twenty (20) amps instead of thirty (30) amps, but I think we are good enough. We could be better, but we are good enough.

Committee Chair Kagawa: Next.

Councilmember Yukimura: I have a question.

Committee Chair Kagawa: Go ahead.

Councilmember Yukimura: I prepared an amendment, which I think we showed you in this provision, which was provide capacity in the electrical service...

Committee Chair Kagawa: We can talk about it later.

Councilmember Yukimura: I was just wondering...

Mr. Haigh: We were looking forward to talking about that. I saw your amendment and I know it addresses this issue when it comes to...

Councilmember Yukimura: I am just thinking that if you want it all taken out that I should not even...

Mr. Haigh: No...

Councilmember Yukimura: Okay. Thank you.

Committee Chair Kagawa: Next.

Mr. Haigh: Okay. Ceiling fans—it is in the current code. I personally have not heard any complaints about it, but maybe there are out there. Basically, we are just requiring a rough-in for a ceiling fan, so basically, you are putting in a four-inch box with power to it like a standard light, except it is a reinforced box that can accept a ceiling fan. Again, it is the cost benefit of being able to add a ceiling fan to your house to get comfort from a ceiling fan rather than having to add an air-conditioner. So the intent of the code and the (inaudible) to having this is to provide greater comfort for the homeowners so they are less likely to put in air-conditioning systems. We feel the cost-benefit of putting it in during construction, because it would certainly be much more expensive to put it in after construction if you decided that you wanted a ceiling fan. We feel that this is good in the code and this will be good for the people of Kaua'i.

Committee Chair Kagawa: Questions? Go ahead.

Councilmember Yukimura: So you are saying that this is already in there, this is not a new proposal?

Mr. Haigh: No. I think it is even before the last Energy Code adoption, I think we had it in our code and I know that we definitely had it since our last adoption, but I believe it was even before that.

Councilmember Yukimura: Okay. Chair Kagawa, maybe you can explain what the rationale is for proposing that it be removed or that it remain...

Committee Chair Kagawa: To say that you are removing it, we are giving people the option. I think giving people options is a great thing. Somehow, it is painted like, "Wow, it is a bad thing." What is a bad thing about less government regulation? I think less government regulation is a good thing. Give people the option. People work hard for their money. Let them decide how they want to spend it instead of telling them how to spend it.

Councilmember Yukimura: May I ask a question?

Committee Chair Kagawa: Go ahead.

Councilmember Yukimura: This is just for a rough-in. They have the option of having a rough-in, so it does not mean that they have to have a fan, but should they with climate change, things are getting hotter, so then they decide this is really hot, and then they have a choice of just putting in a fan because they have a rough-in or of putting in an air-conditioner, right?

Mr. Haigh: Correct. We feel that the cost-benefit of putting it in during construction is a minor cost, and the future benefit...I know since I have lived on Kaua'i, it sure seems like it has been getting hotter and I enjoy my ceiling fans and I put in ones where they were not before. It goes back to the intent of the Energy Code and the things that we are putting in there is to save energy and a lot of what we are doing is to provide greater comfort in a tropical environment to discourage air-conditioning, because even though it is getting hotter, I think almost everybody in this room grew up in homes that were not air-conditioned, but I bet a good majority of people in this room now have air-conditioners at home. It is a societal change that we are seeing, but ceiling fans are very helpful in providing comfort when it is hot, with a minimum cost.

Councilmember Yukimura: It will be saving energy and money for the homeowner.

Mr. Haigh: If they decide to put an air-conditioner instead.

Councilmember Yukimura: Okay. Thank you.

Committee Chair Kagawa: Anymore questions on this? Seeing none, we are going to ask that we defer everything because we have to wait for Doug's amendment until the 21st anyway. If you folks want to go in a different direction, we can.

Councilmember Chock: Chair, are you going to pull this amendment and then redo it?

Committee Chair Kagawa: This amendment is not good because he said that a lot of my amendments need to be redone and I do not want to waste any more time considering this amendment when we know that we are going to defer to November 21st anyway, and I am sure that Councilmember Yukimura will have a lot of questions for my next amendment as well.

Councilmember Chock: I am just getting clear, are your plans to pull this and you are going to introduce one removing these sections?

Committee Chair Kagawa: Yes.

Councilmember Chock: Is that what your plan is?

Committee Chair Kagawa: Yes.

Councilmember Chock: Okay.

Committee Chair Kagawa: I am going to listen to our superintendent to what he wants and we will do it. Anybody else? Questions? Who made the motion?

Councilmember Kaneshiro: I made the motion to approve. Can we just vote "no" on it?

Council Chair Rapozo: Just withdraw it.

Councilmember Kaneshiro moved to withdraw the amendment to Bill No. 2710, Draft 1, as circulated, and as shown in the Floor Amendment, which is attached hereto as Attachment 1. Councilmember Brun withdrew the second.

Committee Chair Kagawa: Anybody else want to do their amendments or are we going to crank it out all in one day and work really hard? I think it is a nightmare for staff when we keep on prolonging knowing that we are going to defer anyway. Councilmember Yukimura.

Councilmember Yukimura: I have an amendment, which I would like to have discussed, so if there is any further research or a redrafting of it, we can do that and not have to do that on the 21st.

Committee Chair Kagawa: Then if you can help me, if you wanted some estimates or whatever done with questions to my amendment, you can have Staff give it to me in writing. That would be easier for me. Go ahead.

Council Chair Rapozo: Were you going to take public testimony? Your rules are suspended. If you are going to entertain, you have to call it back to order, but now might be an opportunity to take public testimony while your rules are suspended.

Committee Chair Kagawa: Okay. I do not know if she is going to need them on her amendment though. She wants to discuss her amendment and she might need them.

Councilmember Yukimura: Can we just have a discussion on it then? Maybe we have to come back into session for me to...

Committee Chair Kagawa: Okay, the meeting is called back to order.

There being no objections, the meeting was called back to order, and proceeded as follows:

Councilmember Yukimura moved to amend Bill No. 2710, Draft 1, as circulated, and as shown in the Floor Amendment, which is attached hereto as Attachment 2, seconded by Councilmember Chock.

Committee Chair Kagawa: Go ahead.

Councilmember Yukimura: These came up when we had the discussion maybe in the first session on the bill about the electrical chargers and actually it is trying to encapsulate what I believe you suggested from the floor, Doug. Do you have it?

There being no objections, the rules were suspended.

Mr. Haigh: Yes, I do.

Councilmember Yukimura: I think we acknowledge that the rough-in for a 30-amp circuit, which is presently in the code, was too much and that this idea of providing...this is the amendment... "Provide capacity in the electrical service and Main panel for an electrical vehicle charging station for each residence" was a better way of doing it, but I would like to get your thoughts on it because you said with respect to Councilmember Kaneshiro's by request amendment regarding electrical vehicle charger power that we did not need that. Is this helpful or not?

Mr. Haigh: Well, I think this is helpful in that for residential single-family, we have the requirement in the Electrical Code. For condominiums and what not, this would assure that they have power for their residences in the condominiums. All it does is require that there is adequate size in the panel. I believe this amendment was recommended by the Hawai'i Contractors Association...General Contractors Association, the State General Contractors Association. I support it.

Committee Chair Kagawa: Shannon Alivado.

Mr. Haigh: Yes.

Councilmember Yukimura: Okay, so it was recommended by General Contractors. It really applies actually or it extends the application to condominiums...

Mr. Haigh: Well, for the commercial side, but they are in the residential, they are not...

Councilmember Yukimura: Well, this applies for residential, right? This is...

Mr. Haigh: Yes, but in residential, this one does not include the conduits, but in the electrical code, we have conduits that get to the garage for residential. On the commercial one, which we will get to, then she is requiring conduits.

- Councilmember Yukimura: The commercial one what?
- Mr. Haigh: If you read the R402.2 on your amendment compared to the C406.8, you will notice that on the residential side, she is just talking about capacity in the electrical system main panel, but for the commercial side, they are also including conduits in raceways.
- Councilmember Yukimura: Okay.
- Committee Chair Kagawa: So conduits and raceways, is that the connections to the stalls?
- Mr. Haigh: What we would require is to get it out to the parking lot.
- Committee Chair Kagawa: Okay. Go ahead.
- Mr. Haigh: They have stub-outs there for future.
- Councilmember Yukimura: Okay. I do not have any further questions, unless somebody else does.
- Council Chair Rapozo: I just have a question.
- Committee Chair Kagawa: Go ahead.
- Council Chair Rapozo: What is your position on number 2?
- Mr. Haigh: I accept both of them, I think they are good. I have kind of worked with Shannon as she was working with her people and talking about it. This was discussed at the State Building Code Council.
- Councilmember Yukimura: Okay. I was only talking about the first one, but number 2, "provide capacity within building..."—this is for commercial—"electrical system to service parking lots." This is in-line with our goals of transforming our transportation energy scenario to electrical vehicles over time, right?
- Mr. Haigh: Yes.
- Councilmember Yukimura: Okay.
- Mr. Haigh: I do not know if that is the goal, but that is what this helps...
- Councilmember Yukimura: I believe that is the goal of the State.
- Mr. Haigh: Okay, yes.

Committee Chair Kagawa: Councilmember Kaneshiro.

Councilmember Kaneshiro: I have a question—“no less than one, or ten percent of parking stalls, whichever is greater.”—Is there already regulation regarding commercial buildings to have a certain amount of stalls for electric outlets and is this consistent with that?

Mr. Haigh: There is State law, but not County law.

Councilmember Kaneshiro: This is consistent with State law?

Mr. Haigh: I am not sure...

Councilmember Yukimura: I think it is one hundred (100) parking spaces.

Mr. Haigh: I forget what the State law is and I know there is talk in the legislature to massage it and change it.

Councilmember Kaneshiro: For me, I would be more comfortable if this reflected the State law. If this requires more electrical outlets than what the State law is asking for, then I cannot support it.

Mr. Haigh: I think Shannon was coordinating it with the State law, but I am not an expert on that aspect of the State law.

Councilmember Yukimura: Well, we will have time now and that is the kind of thing I wanted to flush out now so that we can check on that, if you could, Doug?

Mr. Haigh: Yes.

Councilmember Yukimura: Okay. Thank you.

Committee Chair Kagawa: Like I said, the goal was always that I wanted this Council to tackle it, but sometimes, if all the answers are not there, then we just have to educate the new Council and the Staff is going to remain here and they can educate the next Council if that needs to be done. I do not want to rush and bring out a product that is not ready. I rather it just stand the course of time and if the Council cannot do it right, then the next Council can step up and do it. Councilmember Yukimura.

Councilmember Yukimura: I will withdraw my motion and I have one more set of amendments.

Committee Chair Kagawa: Okay. I will call the meeting back to order.

There being no objections, the meeting was called back to order, and proceeded as follows:

Councilmember Yukimura moved to withdraw the amendment to Bill No. 2710, Draft 1, as circulated, and as shown in the Floor Amendment, which is attached hereto as Attachment 2. Councilmember Chock withdrew the second.

Committee Chair Kagawa: Okay. Go ahead.

Councilmember Yukimura: The next set is the amendments...I believe they are what the Masonry Institute recommended.

Councilmember Yukimura moved to amend Bill No. 2710, Draft 1, as circulated, and as shown in the Floor Amendment, which is attached hereto as Attachment 3, seconded by Councilmember Kaneshiro.

Committee Chair Kagawa: I believe the contractors have no issue with these.

Councilmember Yukimura: With these?

Committee Chair Kagawa: Yes.

Councilmember Yukimura: Maybe we can pass it.

Committee Chair Kagawa: Let us just hold off on all until...I would rather just...

Councilmember Yukimura: If we can do it, we can forget about it. We do not have to remember to introduce it again. It is up to you.

Committee Chair Kagawa: Okay, the Staff wants us to pass this one if we are ready. Councilmember Yukimura, you have the floor.

Councilmember Yukimura: I would just like to hear their thoughts on it. I am assuming it was okay because we have been vetting that.

Committee Chair Kagawa: Okay, I will suspend the rules.

There being no objections, the rules were suspended.

Mr. Haigh: We fully support this amendment and an example of a trade group looking at the code, coming to us with scientific fact and working with us on how to make it work, so we all came to an agreement and they looked at things a little differently than how it was being looked at, but we saw that they had good justification for how they came up with it, so we feel it is a good amendment.

Committee Chair Kagawa: Can you explain the amendment in a nutshell for the general public that perhaps may have a hollow tile house or something in mind?

Mr. Haigh: The original code required insulation for Concrete Masonry Unit (CMU) walls.

Committee Chair Kagawa: So basically, do you have to put another wall inside of the hollow tile?

Mr. Haigh: Yes, or you put an insulation board on the outside and then do a finish on it.

Committee Chair Kagawa: So basically another wall on the wall?

Mr. Haigh: Yes. They came with scientific information that justified that for our climate, it is not necessary and we accepted that. We did require that they still have to use heat-reflective paint so that they minimize the heat gain and that is something we came up with and they agreed and accepted that. Originally, they did not have it and we talked about the reason why we thought it was important and they agreed and came up with that. Then there was an issue, so it is just basically accepting CMU wall to be used without having to add additional insulation.

Committee Chair Kagawa: So without needing to put insulation? Is this for commercial and residential?

Mr. Haigh: This is commercial.

Committee Chair Kagawa: Just commercial?

Mr. Haigh: Yes. We do not need it because you are in a tropical home, you already do not have to provide insulation.

Committee Chair Kagawa: Okay. So the tropical home says if we have CMU because it benefits you in strong winds and stuff that...

Mr. Haigh: It does not even discuss the issue because it is a non-issue because no walls are required to have it, so it did not differentiate between the different types of walls.

Committee Chair Kagawa: Okay.

Councilmember Yukimura: Thank you, Doug. I agree with you that it is a great example of two different interests coming together explaining each position and you folks finding a middle ground to make it all work.

Mr. Haigh: I did seek help from our State Energy Coordinator on the technical issues to make sure of that.

Councilmember Yukimura: Okay. Thank you.

Committee Chair Kagawa: Any further questions on this amendment?

The motion to amend Bill No. 2710, Draft 1, as circulated, and as shown in the Floor Amendment, which is attached hereto as Attachment 3 was then put, and unanimously carried.

Committee Chair Kagawa: Motion carried. We will take public testimony at this time. The action is that we are going to defer until November 21st and at that time, we should have amendments from the Building Division. I think they have some that they have done in-house and I will have my amended version, and then that is it I think. We already took Councilmember Yukimura's amendment...well, we have one of yours to consider.

Councilmember Yukimura: Thank you.

Committee Chair Kagawa: Go ahead.

TOM BUMGARDNER: My name is Tom Bumgardner and I would just like to make a few comments. You are trying to pass a law in the State about amending the Charter about the electric power authority to take it away from you as a Council and give it back to the electric company; however, in this case of improving the electricity throughout homes, we seem to be going towards doing a lot of electric in our homes and not gas, because it is cheaper and we can do solar. But we are slowly forgetting that all of the meters in all of these homes are set up for two hundred (200) amps, yet they only get one hundred (100) amps. It probably costs one thousand dollars (\$1,000) or two thousand dollars (\$2,000) to convert your home over to two hundred (200) amps, which you will need in order to run your electric, a 30-amp plug for your electric car, and if you do not have solar, and a lot of people cannot afford that, you will run out of electricity to the houses so your benefit will be gone if you put in fans in the attic and fans all over your house. You are increasing your output that each individual is taking from the electric system and you have to get the electric company to step-up and say, "Okay, we are going to put two hundred (200) amp meters in these new homes" and if you see the size of these new homes over here in Hanamā'ulu, they are going to need a lot of power. You are not having one (1) person live there; you have fifteen (15), two (2) families or maybe three (3) families. When you throw electric cars in and then you are going to throw electric buses in, too, which is a whole other subject, you are going to have to have a lot of power coming out of that electric company and this island has all the sun we could ever use and we do not really need solar (inaudible) wind machines, but they are not considering any of this when they are saying, "Okay, we are going to do this and put all of these plugs in," yes, but you have to have power to them plugs and it might be something that they would consider to work with the electric company to make sure that the power is there to be used. That is all. Thank you.

Committee Chair Kagawa: Thank you. Any questions? Further testimony? Seeing none, the meeting is called back to order. Members, any discussion? None? Everybody is done with this?

There being no objections, the meeting was called back to order, and proceeded as follows:

Councilmember Kaneshiro moved to defer Bill No. 2710, Draft 1, as amended to Bill No. 2710, Draft 2, seconded by Councilmember Brun, and unanimously carried.

There being no further business, the meeting was adjourned at 9:58 a.m.

Respectfully submitted,



Codie K. Tabalba
Council Services Assistant I

APPROVED at the Committee Meeting held on November 21, 2018:



ROSS KAGAWA
Chair, PWPR Committee

(October 17, 2018)

FLOOR AMENDMENT

Bill No. 2710, Draft 1, Relating to the Energy Conservation Code

Introduced by: ARRYL KANESHIRO (By Request)

Amend Bill No. 2710, Draft 1, as follows:

1) Amend proposed Section C403.2.4.2.4 to read as follows:

“**C403.2.4.2.4 Door switches.** Opaque and glass doors opening to the outdoors in hotel [and motel] sleeping units, guest suites, and time-share condominiums shall be provided with controls that disable the mechanical cooling or reset the cooling setpoint to 90° F or greater within five minutes of the door opening. Mechanical cooling may remain enabled if the outdoor air temperature is below the space temperature.”

2) Amend Section 405.2.4 to read as follows:

“**C405.2.4 Specific application controls.** Specific application controls shall be provided for the following:

1. Display and accent light shall be controlled by a dedicated control that is independent of the controls for other lighting within the room or space.

2. Lighting in cases used for display case purposes shall be controlled by a dedicated control that is independent of the controls for other lighting within the room or space.

3. Hotel [and motel] sleeping units and guest suites and time-share condominiums shall have a master control device that is capable of automatically switching off all installed luminaires and switched receptacles within 20 minutes after all occupants leave the room.

Exception: Lighting and switched receptacles controlled by captive key systems.

4. Supplemental task lighting, including permanently installed under shelf or under cabinet lighting, shall have a control device integral to the luminaires or be controlled by a wall-mounted control device provided that the control device is readily accessible.

5. Lighting for nonvisual applications, such as plant growth and food warming, shall be controlled by a dedicated control that is independent of the controls for other lighting within the room or space.

6. Lighting equipment that is for sale or for demonstrations in lighting education shall be controlled by a dedicated control that is independent of the controls for other lighting within the room or space.”

- 3) Amend proposed Section C405.10 to read as follows:

“C405.10 Sub-metering [(Mandatory)]. In new buildings with tenants, metering [shall] may be collected for the entire building and individually for each tenant occupying a space with three electrical circuits or more. Tenants shall have access to data collected for their space. A tenant is defined as “one who rents or leases from a landlord.”

- 4) Amend Section C503.3.1 to read as follows:

“C503.3.1 Roof replacement. Roof replacement of uninsulated roofs [shall] may include [at least two] any of the following:

1. Energy Star compliant roof covering
2. Radiant barrier
3. Attic ventilation via solar attic fans or ridge ventilation or gable ventilation”

- 5) Amend proposed Section R404.2 to read as follows:

“R404.2 Electrical vehicle charger power. Electrical rough-in of a 30 amp circuit for future electrical vehicle charger [shall] may be installed in garage/carport area.”

- 6) Amend proposed Section R404.3 to read as follows:

“R404.3 Ceiling Fans [(Mandatory)]. A ceiling fan or ceiling fan rough-in [is] may be provided for bedrooms and the largest space that is not used as bedroom.”

(Material to be deleted is bracketed. New material to be added is underscored.)

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(October 17, 2018)

FLOOR AMENDMENT

Bill No. 2710, Draft 1, Relating to the Energy Conservation Code

Introduced by: JOANN A. YUKIMURA

Amend Bill No. 2710, Draft 1, as follows:

1. Amend Section R404.2 to read as follows:

“R404.2 Electrical vehicle [charger power.] capability.
[Electrical rough-in of a 30 amp circuit for future electrical vehicle charger shall be installed in garage/carport area.] Provide capacity in the electrical service and Main panel for an electrical vehicle charging station for each residence.”

2. Insert a new amendment in appropriate numerical order as follows, and renumber all subsequent sections accordingly:

“() Adding Section C406.8. Section C406.8 is added to read as follows:

C406.8 Electric vehicle infrastructure. Provide capacity within the building’s electrical distribution system, including conduits and raceways, for individual parking spaces to serve electric vehicle chargers for no less than one, or ten percent of parking stalls, whichever is greater.”

(Material to be deleted is bracketed. New material to be added is underscored.)

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(October 17, 2018)
 FLOOR AMENDMENT
 Bill No. 2710, Draft 1, Relating To The Energy Conservation Code

Introduced by: JOANN A. YUKIMURA

Amend Bill No. 2710, Draft 1, as follows:

1. Amend Section C402.2.3 to read as follows:

“C402.2.3 Thermal resistance of above-grade walls. The minimum thermal resistance (R-value) of materials installed in the wall cavity between framing members and continuously on the walls shall be as specific in Table C402.1.3, based on framing type and construction materials used in the wall assembly.

Exceptions:

Continuous insulation for [wood and] wood, metal framed, and mass walls are not required when one of the following conditions are met:

1. Walls have a covering with a reflectance of ≥ 0.64
2. Walls have overhangs with a projection factor equal to or greater than 0.3. The projection factor is the horizontal distance from the surface of the wall to the farthest most point of the overhang divided by the vertical distance from the first floor level to the bottom most point of the overhang.
3. Concrete, CMU, and similar mass walls are 6 inches or greater in thickness.

The R-value of integral insulation installed in concrete masonry units shall not be used in determining compliance with Table C402.1.3.

Mass walls shall include walls:

1. Weighing not less than 35 psf (170 kg/m²) of wall surface area.
2. Weighing not less than 25 psf (120 kg/m²) of wall surface area where the material weight is not more than 120 pcf (1900 kg/m³).
3. Having a heat capacity exceeding 7 Btu/ft²·°F [(144 kJ/m²·K).]
4. Having a heat capacity exceeding 5 Btu/ft²·°F (103 kJ/m²·K), where the material weight is not more than 120 pcf (1900 kg/m³).”

2. Insert a new amendment in appropriate numerical order as follows, and renumber all subsequent amendments accordingly:

“() Amend notes for Table R402.1.2 Insulation and Fenestration Requirements by Component, as follows:

“For S1: 1 foot = 304.8 mm.

a. R-values are minimum. *U*-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed *R*-value of the insulation shall not be less than the *R*-value specified in the table.

b. The fenestration *U*-factor column excludes skylights. The SHGC column applies to all glazed fenestration. Exception: Skylights may be excluded from glazed fenestration SHGC requirements in climate zones 1 through 3 where the SHGC for such skylights does not exceed 0.30.

c. “15/19” means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. “15/19” shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the home. “10/13” means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.

d. R-5 shall be added to the required slab edge *R*-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Climate Zones 1 through 3 for heated slabs.

e. There are no SHGC requirements in the Marine Zone.

f. Basement wall insulation is not required in warm-humid locations as defined by Figure R301.1 and Table R301.1.

g. Or insulation sufficient to fill the framing cavity, R-19 minimum.

h. The first value is cavity insulation, the second value is continuous insulation, so “13+5” means R-13 cavity insulation plus R-5 continuous insulation.

i. The second *R*-value applies when more than half the insulation is on the interior of the mass wall.

j. Exemption: R-value for mass walls are not required if mass walls have a covering with reflectance of ≥ 0.64 and/or walls have overhangs with a projection factor equal to or greater than 0.3.”

3. Insert a new amendment in appropriate numerical order as follows, and renumber all subsequent amendments accordingly:

“() Amend Section R402.2.5 to read as follows:

R402.2.5 Mass walls. Mass walls for the purposes of this chapter shall be considered above-grade walls of concrete block, concrete, insulated concrete form (ICF), masonry cavity, brick (other than brick veneer), earth (adobe, compressed earth block, rammed earth) and solid timber/logs, or any other walls having a heat capacity greater than or equal to 6 Btu/ft² x °F (123 kJ/m² x K).

Exception: Insulation or R-value for mass walls, indicated in Table R402.1.2, is not required when one of the following conditions are met:

4. Walls have a covering with a reflectance of ≥ 0.64

5. Walls have overhangs with a projection factor equal to or greater than 0.3. The projection factor is the horizontal distance from the surface of the wall to the farthest most point of the overhang divided by the vertical distance from the first floor level to the bottom most point of the overhang.

(Material to be deleted is bracketed. New material to be added is underscored.)

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