

**INFRASTRUCTURE AND ENVIRONMENTAL
MANAGEMENT COMMITTEE**

Council of the County of Maui

MINUTES

December 5, 2014

Council Chamber, 8th Floor

CONVENE: 1:35 p.m.

PRESENT: VOTING MEMBERS:
Councilmember Elle Cochran, Chair
Councilmember Stacy Crivello, Vice-Chair
Councilmember Robert Carroll
Councilmember Donald G. Couch, Jr.

EXCUSED: VOTING MEMBERS:
Councilmember Don S. Guzman
Councilmember G. Riki Hokama
Councilmember Mike White

STAFF: Sharon Brooks, Legislative Attorney
Raynette Yap, Committee Secretary

Dawn Lono, Council Aide, Hana Council Office (via telephone conference bridge)
Denise Fernandez, Council Aide, Lanai Council Office (via telephone conference bridge)
Ella Alcon, Council Aide, Molokai Council Office (via telephone conference bridge)

ADMIN.: Douglas P. McLeod, Energy Commissioner, Office of Economic Development
Jeffrey T. Ueoka, Deputy Corporation Counsel, Department of the Corporation Counsel
Tadahiro Togami, Hitachi Advanced Clean Energy Corporation
Naoya Wajima, Hitachi Advanced Clean Energy Corporation

OTHERS: Ben J. Hall
Plus (3) Others

PRESS: *Akaku Maui County Community Television, Inc.*

CHAIR COCHRAN: ...*(gavel)*... Aloha. Will the Infrastructure and Environmental Management Committee meeting please come to order? I am Councilmember Elle Cochran, the Chair of this Committee, and it is Friday, December 5, 2012 around 1:35 p.m. --

COUNCILMEMBER COUCH: 2012?

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CHAIR COCHRAN: --and I wanna...oh, 2014. Did I say 2012? Okay, 2014. And thank you, Members, for being here. It's odd to have a meeting on a Friday after full Council, but here we are, thank you. And before we begin, please silence or turn off any cell phones or noise-making devices. And let me introduce the Members that are here with me today. I have Vice-Chair of the Committee, Stacy Crivello.

VICE-CHAIR CRIVELLO: Aloha, Chair, and Merry Christmas.

CHAIR COCHRAN: Aloha and Merry Christmas to you. And Vice-Chair of the Council, Bob Carroll.

COUNCILMEMBER CARROLL: Mele Kalikimaka and good afternoon, Chair.

CHAIR COCHRAN: Mele Kalikimaka. And Don Couch, who soars like an eagle.

COUNCILMEMBER COUCH: Aloha and good afternoon, Chair.

CHAIR COCHRAN: Aloha, good afternoon, Mr. Couch. And from our Committee Staff we have Sharon Brooks, Legislative Attorney.

MS. BROOKS: Good afternoon.

CHAIR COCHRAN: Aloha, nice to have you. And Committee Secretary, Rayna Yap, who is doing her job, quite lovely, distributing papers. And, Members, we have testimony, will be coming up in a few moments. And those in the audience or in our District Offices that would like to testify, please sign up with the desk. We have our desk out here on the lobby on the eighth level. And please testify only on the items that are on the agenda today, and state your name and any organizations you may be affiliated with. And we do have connection to District Offices. And I will now check in with those offices. Hana, Ms. Lono, are you there?

MS. LONO: Good afternoon, Chair, this is Dawn Lono at the Hana Office.

CHAIR COCHRAN: Thank you, Ms. Lono. And over on Molokai Office?

MS. ALCON: Good afternoon, Chair, this is Ella Alcon on Molokai.

CHAIR COCHRAN: Aloha, Ella, thank you for being there. And Lanai, Ms. Fernandez, are you there? Not yet, okay. So, we shall move on and keep checking in with Lanai. At this point, do we have any testifiers?

MS. BROOKS: There are no testifiers in the Chamber.

CHAIR COCHRAN: Okay. Thank you, Ms. Brooks. Members, we have no testifiers. And, District Offices, if anyone gets testimonies, please e-mail or call in to our Staff and let them know. At this point, I guess, shall I check back with Lanai?

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MS. BROOKS: Yeah.

CHAIR COCHRAN: Yeah? Ms. Fernandez, have you arrived on Lanai? Okay. Well, I believe, there's someone at our front lobby here looking to sign up for testimony. So, Members, we'll give them a few moments and they'll come down to the podium and we shall start testimony with no objections.

COUNCIL MEMBERS: No objections.

CHAIR COCHRAN: Let me just briefly explain, I guess, that we do have two items on the agenda today, and we'll be doing IEM-62, which is Approving County Facility Use in the JUMP Smart Maui Project. And also I will be doing the referrals for the next upcoming Council term for my master agenda. And it looks like we have a gentleman coming down to the podium for testimony. Is that right...are you testifying, sir, gentleman?

... BEGIN PUBLIC TESTIMONY ...

MR. HALL: If Item 4 is on the agenda, yes.

MS. YAP: Ben Hall.

CHAIR COCHRAN: Okay. Sorry. Ben Hall?

MR. HALL (*from gallery*): Yes.

CHAIR COCHRAN: Oh, you're here for the bike tours?

MR. HALL (*from gallery*): Yes, uh-huh.

CHAIR COCHRAN: No, sir. Today, we're having a presentation from our JUMP Smart Program Project; and, also, we're just doing Committee referrals. So, the bike study is not on the agenda today unfortunately, sorry.

MR. HALL (*from the gallery*): So that means it's been referred or not been referred?

CHAIR COCHRAN: It has not officially, yet; so thank you.

MR. HALL (*from the gallery*): And it won't be discussed again?

COUNCILMEMBER COUCH: Short recess?

CHAIR COCHRAN: So thank you. Well, let me take a brief recess. . . .(*gavel*). . .

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RECESS: 1:38 p.m.

RECONVENE: 1:41 p.m.

CHAIR COCHRAN: . . .(*gavel*). . . Will the Infrastructure and Environmental Management Committee please reconvene? And at this point, let me check back with our District Offices if there's any testimonies. Hana Office?

MS. LONO: The Hana Office has no one waiting to testify, Chair.

CHAIR COCHRAN: Thank you, Ms. Lono. Molokai Office?

MS. ALCON: There's no one here on Molokai waiting to testify.

CHAIR COCHRAN: Thank you, Ms. Alcon. And on Lanai, any testifiers?

MS. FERNANDEZ: There's no one waiting to testify on Lanai.

CHAIR COCHRAN: Thank you, Ms. Fernandez. Ladies, thank you very much. We have no one waiting here for any testimonies either. So, Members, without objection, we shall close public testimony.

COUNCIL MEMBERS: No objections.

COUNCIL MEMBERS VOICED NO OBJECTIONS. (EC, SC, RC, DC)

. . . END OF PUBLIC TESTIMONY . . .

CHAIR COCHRAN: Thank you very much. And ladies, thank you, and Merry Christmas to you folks. Aloha.

**ITEM NO. 62: APPROVING COUNTY FACILITY USE IN THE JUMP
SMART MAUI PROJECT (CC 14-236)**

CHAIR COCHRAN: Okay, let's jump in to our first item, which is IEM-62, Approving County Facility Use in the JUMP Smart Maui Project. And this is "AUTHORIZING THE FIRST AMENDMENT TO BATTERY LICENSE AGREEMENT". And the purpose of the revised...it's a revised proposed resolution, is to authorize an extension, through July 31, 2019, of the Battery License Agreement dated August 1, 2013, with ABC-USA [*sic*], Inc., now known as Hitachi Advanced Clean Energy Corporation, for the operation and maintenance of a stationary lead-acid battery testing facility on a portion of the Kihei Wastewater Treatment Plant

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site, located at 480 Piilani Highway, Kihei, Maui, Hawaii. And a revised proposed resolution entitled "AUTHORIZING THE FIRST AMENDMENT TO THE SVC LICENSE AGREEMENT". The purpose of the revised proposed resolution is to authorize an extension, through July 31, 2019, of the Static Var Compensator ("SVC") License Agreement dated August 1, 2013, with ABC-USA *[sic]*, Inc., now known as Hitachi Advanced Clean Energy Corporation, for the operation and maintenance of an SVC and Advanced Clean Energy...oh, wait...maintenance of SVC and related cables and utility lines on a portion of the site of the Department of Public Works, Highways Division, Makawao Garage, 1285 Makawao Avenue, Makawao, Maui, Hawaii. And we will be receiving a presentation, I believe, here from JUMP Smart Maui Project from the Office of Economic Development. And with that it will be represented by Doug McLeod. Aloha, Mr. McLeod, for being here. Thank you. And also from Corporation Counsel, we have Jeff Ueoka.

MR. UEOKA: Good afternoon.

CHAIR COCHRAN: And, aloha. And representing the Licensee from Hitachi Advanced Clean Energy Corporation, we have Mr. Tadahiro Togami.

MR. TOGAMI: Yeah.

CHAIR COCHRAN: Yes, hello, welcome.

MR. TOGAMI: Aloha, thank you.

CHAIR COCHRAN: Aloha. And is it Naoya Wajima? And Mr. Wajima is here sitting towards the back. So, I have arranged this Committee to receive a presentation from OED and to give us an update or, you know, introduce us and tell us well what this JUMP Smart Maui Project is about. So, Mr. McLeod, I shall now turn the floor over to you and please share any opening comments that you might have.

MR. McLEOD: Thank you, Chair Cochran. It's a pleasure to be here. JUMP Smart Maui is a name that a lot of people have heard now. We have, at this point; there are 200 people in the community that have volunteered to be part of the project. And today, the document in front of you only goes to two particular pieces of equipment that are currently installed at County facilities, and we're asking that the time period that they can remain there be extended. However, I know, that the Chair wanted a broader explanation of what JUMP Smart Maui is about. So, we have prepared some slides that I'd like to go through now if it's okay with the Chair.

CHAIR COCHRAN: Yes, please proceed.

MR. McLEOD: *(PowerPoint Presentation)* The first thing to know is that EV sales are rising on Maui, and we were at a conference about ten days ago, and I didn't put this piece of information on the slide because we haven't gotten written confirmation. But what Nissan was telling us is that

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Maui island now has the highest EV density in the world. So, compared to anywhere else per capita we have more EVs at this point than anywhere else that they know of. So that is really a direct result of people seeing this JUMP Smart Maui equipment out there and knowing that it's available as a network of rechargers. So, in the picture here on the left I just wanted to emphasize that the piece of equipment that most people are most familiar with from this project is an EV charger. And what those are what are called the quick chargers. They are a higher voltage DC fast charger and they allow for a Nissan LEAF to be charged up at approximately 20 to 30 minutes to a level high enough to go on for the rest of the day. Put a slide up here that asks how does JUMP Smart Maui benefit the community, because a lot of times we get into the engineering details and it's hard to really understand why are we doing this. The thing that the Japanese realized early on that, you know, took us a while to realize is that if you start to think of scalability one of the really nice things about electric vehicles is that if you want to you could add 500 or 1,000 at once and really change the dynamic. This point number one up there talks about nighttime wind "curtailment" and, I know, many people on the Council have heard discussions of this curtailment notion. But what's happening is that in the evening it is very common to have a situation where wind conditions allow the wind farms to make power, but MECO says that there simply isn't enough demand on the system to take that power. The way EVs can be used, even today, even before any real upgrades to the system, is to be on a timer where if they're being charged late in the evening, they are helping to solve our curtailment problem. So, we did some really rough calculations and we think in the range of 2,000 EVs would start to take that power on a regular basis and currently we probably have closer to 500. The second thing down here is just the notion that this project gets us...gets all of us on the island thinking of batteries on wheels not cars with different fueling process. And the idea that we're going to hear is that it creates all kinds of possibilities. You know, for example, if you think about it as a battery that can move around, when you have localized disasters, you could simply bring in a vehicle and recharge hundreds of cell phones at once. I mean, just small things like that become something you can think of once you realize the potential of having basically a mobile battery rather than just, you know, a car that you repower in a different way. The virtual power plant, at this point, the JUMP Smart Maui Project goes back to about 2011. And there was a first version of it and we're actually in the second phase now. The second phase of this project is designed to explore this idea of a virtual power plant. So, a virtual power plant is the idea that if we had let's say, for example, 1,000 Nissan LEAFs, but they were under common control in terms of the battery, that you could go to the utility, and say I have available all the features here that you need from a power plant that you don't need to build a new traditional power plant. If you can prove some of the things that they're gonna try to prove in JUMP Smart Maui, it also means that EVs in the neighborhood might be able to help stabilize the grid from some of the solar PV impacts. So, these are the ideas that are being explored really in the big picture this virtual power plant idea. The County is one of 200 volunteers. That number is growing. MEDB really acts as the back office at this point for the JUMP Smart Maui Project. Down here we mentioned there's a process that's been used as far as selecting the County sites. For example, the Makawao Highways Division Baseyard, this same group was approached about a parking lot in Paia, and we all agreed that didn't make sense for a number of reasons. So, there was an original list of areas where JUMP Smart Maui was asking to locate equipment, and Makawao...the baseyard came up fairly early on. I'm going to show you a photo in a minute

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here of both of these pieces of equipment. The Kihei Wastewater Treatment Plant was a really logical candidate because JUMP Smart Maui is really centered in Kihei for everything outside of the vehicles themselves. Details of how this works right now as far as the equipment that's been hosted at the County facilities in front of you. First, rent is being paid monthly for use of the container and pad "footprint" at the Makawao Highways Division Baseyard and the Kihei Wastewater Treatment Plant. The rent amount was determined with the help of the Real Property Tax Division, and Guy Hiranaga over there is the right person if there are any questions on how that processes worked. The equipment is operated and maintained by JUMP Smart Maui, and in fact as far as we know, it is still owned at this point by the Japanese government. Here's a picture of the equipment in Makawao. You'll see essentially it looks like a 20-foot container on a small concrete pad. The piece of equipment up above it is an air conditioning unit. And again, you're gonna see they're pretty general from the outside. What's this piece of equipment is supposed to do? If we're trying to simplify a little bit, one of the concerns that's been raised by the utility with regard to solar has to do with how the voltage changes on their circuits. And what they're doing with this device is they do have the ability to locally control voltage. So, it's being tested and it's not clear yet how this may or may not relate to some of the EV features. It may be that we find that the SVC has a really important function, and then we try and see if it can duplicated with EVs. It may be that we just find that this needs to be done with a large piece of equipment. The Kihei Wastewater Treatment Plant, there is essentially two of these containers, and they hold batteries. And as the Chair mentioned, they are lead-acid batteries that is really kind of the traditional battery chemistry. Almost all of you would have cars with lead-acid batteries. They're here again located on pads. These are within the footprint of the Wastewater Treatment Plant itself. Slightly different situation in Makawao where it is within a chain-link fence, but the area is outside of the main fenced area of the baseyard. Finally, I wanted to give you a close-up of what these signs say on the facility. And it says JUMP Smart Maui is a collaborative demonstration project between Japan, Maui, and Hawaii that incorporates smart grid, renewable energy, and all-electric vehicle solutions to achieve a cleaner future for Maui County. And it gives the website. And I would encourage anyone who sees this at home, if you're interested in finding out more really the website is the place to start, and all you need to remember is JUMPSmartMaui.com. I put this slide up here because the document that we're presenting to you has well it basically goes to 2019, and what we've done here is said that you're going to hear information from Hitachi, and they're going to mention that the current expected deadline, I mean expected currently the project ends in the spring of 2016. At this moment in time, I've shown you a picture of a car in the shape of the money because the idea is that these EVs we're trying to find a business model. We're trying to find a way that by using the EVs, the owner of the vehicle is gonna be paid in some way by the utility for services. If we find that model it's going to be easy to see how to use the equipment. If not, they may simply have to remove this equipment, and the agreement that is in front of you simply extends the time period. If there is no clear agreement on how things can be used, again, there is no commitment by the County. The agreement here is very simple. It's an extension letting this equipment stay in place, and 2019 is the date that is on the document for you, but there's nothing at this moment scheduled past 2016 for the test itself. And that's it as far as my presentation. I'm gonna ask Mr. Togami to go...I didn't know how you wanted to handle the questions, Chair. Do you want to?

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CHAIR COCHRAN: Yeah, we'll go on to the next presentation.

MR. TOGAMI: Aloha, and thank you, Chair Cochran. And I'd like to explain about JUMP Smart Maui Project and at first I'm explaining about the Hitachi. Hitachi started for the manufacturing the motor...small motor for the industrial motor in 2000...sorry, about 100 years ago. And currently, Hitachi is now working for the social innovation...*(inaudible)*... social innovation like railway system, or a smart grid system, or a healthcare system. So, Hitachi is now working for this kind of advanced technology and solutions. And this JUMP Smart Maui Project is for the energy-related program and help to integrate renewable energy. So, that's our purpose for this project. So, this is our background of this project. And Hawaii has a big challenge in growth to achieve the renewable energy, 40 percent by 2030, and I think all of you know where. And the...and then, HECO, MECO, and also targeted more challenging percentage, 65 percent, by 2030. So, Hitachi would like to work with to achieve this target from the technical standpoint. And Hitachi is now working with a lot of stakeholders on Hawaii, and Hitachi was founded by Japanese government, called NEDO. And we are developing the technology and taking, they're gathering the data to achieve this target. From the...this is our stakeholders on the Maui County, HECO, MECO, MEDB, that's...*(inaudible)*... lots of stakeholders helping us. Our project started 2011, and currently now under demonstration, and we're gathering the data and doing the analysis for this data. And this project will be continued by 2016. And in this project, we are now trying to solve the, lots of issues due to the excess energy and the fluctuation of the...by the renewable energy, and the distribution voltage line fluctuation. So, that's our purpose to solve these issues. And that's why we developed lots of technology like EV charging infrastructure, and also the battery system, or information/communication technologies. These kind of new technology was installed on Maui island. And as Doug mentioned, one of the big purpose of this project is how to utilize battery energy from the electrical vehicle and that's why we install the charging system on the equipment to realize this EV island. So, currently more than 300 EV volunteers now joining this project and the number is now ongoing, increasing and our target is more than the 500 EV volunteers...*(inaudible)*.... As mentioned virtual power plant is our new Phase 2 technology we would like to try. So, there is some systems and equipment on this project, but today I'd like to highlight the battery and the SVC. These equipment are very important function on this project. So, the battery system is the Kihei Wastewater Treatment and the SVC are located on Makawao Highway Division. That's hold, location of our equipment. So on the battery system that consists of the lead-acid battery and this battery is developed and these technologies are already secured, and these batteries are sealed under the very regulated structure and so no leak problem on this battery. In the Kihei Wastewater battery system there is lots of battery cells was installed at the battery module and this battery will absorb the energy and...absorb the excess energy at nighttime or like discharge the energy. There's some fluctuation happening. And that's a layout on this lead-acid battery and this battery is, are two 20-foot containers. And this lead-acid battery cell now established in these two containers. And the power conditioning system is now also installed at these containers. And regarding the safety features, we installed a fire extinguisher or, and CO2 gas fire suppression system has already been deployed in this system. So, it mean if something happened, if something, trouble in the fire...if something, fire, this system will be taking care of

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the, this, to extinguish the fires like that. And also the SVC: Static Var Compensator is...this system controls the voltage due to the fluctuation of the renewable energy. If the voltage change happened, this system will control the voltage to stabilize distribution network. And also this system will consist of the 20-foot containers and some into the, yeah, 20-foot containers, and the pictures is below. And also this system has a fire extinguisher system and a CO2 gas fire suppression system. So, yeah, so these two components have some, these safety features. In, as a summary, we'd like to realize more integration with renewable energy on Maui by this project. And also to deploy a lot of EV on this island and to make more energy efficient. And the other standpoint of Hitachi and we'd like to make this project the most, the best in the world. And we'd like to deploy this business model into the...all over the world. Thank you.

CHAIR COCHRAN: Thank you, Mr. Togami, for the presentation. And Members, I just failed to mention but I also have asked Finance, Environmental Management, and Public Works Departments to be on call for us should we have the need to get some answers from them in regards to the project. So, at this time, the floor is open for discussion or if our presenters have any closing comments at this point. Mr. McLeod.

MR. McLEOD: I didn't have any comments other than I know it's kind of complex when you get it all at once, and if there are questions we'll try to make it comprehensible.

CHAIR COCHRAN: Okay, thank you very much. Mr. Couch.

COUNCILMEMBER COUCH: Thank you, Madam Chair. And thank you guys for your presentations. I've been following this project for quite a bit and it's pretty impressive. I just wanted to, Mr. McLeod, you talked about the virtual power plant and you were talking about if enough EV owners hui up, the vehicles can substitute for a power plant. But it isn't in replacing...it isn't replacing in the existing power plant 'cause they gotta get the power from somewhere, right? Or is this or is your basis is the only source of power is renewable energy from either the wind curtailment or extra solar?

MR. McLEOD: Yes, great point. The answer is, I guess, I didn't give you all the facts. And one of the things that MECO is asking for going forward is, you know, a focus on quicker reacting units. So, these would replace what they used to call a peaking unit and essentially would be units that would be ramping up in the late afternoon and early evening when they get to their maximum load. So, it wouldn't be replacing a full power plant in that sense. And what I'm saying is that, yes, a certain number of these could be filled entirely with curtailed wind power. Not every single day, but in terms of averages, yeah. It's sort of free renewable power that would be available if you could capture it at the right moment in time.

COUNCILMEMBER COUCH: So, you're talking EVs or the containers or both?

MR. McLEOD: The EV's number one, and then the battery, one of these containers essentially does hold energy as a battery, and you could, in fact, choose as part of their program, they can choose

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when they draw. So, yes, they could choose to have their draw also occur at a time when there's curtailed wind.

COUNCILMEMBER COUCH: Okay, so as far as using the EVs, it would be just that's how you power them up. But they wouldn't be providing power for anybody unless, as you mentioned, in an emergency situation?

MR. McLEOD: The idea is that down the road we find a way, like they say a business model, where utility agrees that there's a financial value to the storage. And so, it might be specific to time of day or a place on the island. And that's what they're hoping they can get to in this next step is to make it a little more concrete. Like literally we have this idea today and so, this idea of the virtual power plant is so. pretty revolutionary, and the hope is within a year or two you could advance it to where we're really saying what the homeowner can do to participate.

COUNCILMEMBER COUCH: Okay. Good 'cause that's I'm sure one of the things we were looking at is figuring out how to use power that we generate too much of at the wrong times. We need the power when the sun is not out or the wind is not going. So, this is...this sounds really great. I applaud your efforts. How is Maui Electric working with you on this? I noticed they are not up here discussing...how are they working on integrating this stuff? I know Mahina is in the back, so.

MR. McLEOD: Yes. They are one of the stakeholders for this and they are regular participants. And I would say that honestly they have been...the EV part of it is not as critical on the Maui Electric side, but the SVC part in this big battery wouldn't...they have cooperated on that.

COUNCILMEMBER COUCH: Thank you, Chair.

CHAIR COCHRAN: Okay, thank you, Mr. Couch. Members, any other comments or questions? Okay, so I did have, I guess, a question in relation to what is the relation with MECO, I guess, and, you know, how does the project relate to that entity 'cause it's just. I don't know. This is all new so I'm just trying to figure out, you know, Mr. McLeod, I live off the grid. So, my PV, and wind power, my battery for my backup energy, and thereby I can, when it's night time, no sun out, I still have power because during the day it had put storage into my battery. So, I'm trying to picture this on a larger scale obviously with your 20-foot large battery...container large. And then so, but the wiring and the structure where does, you know, I mean, I'm just trying to see how does it feed into the existing utility lines and things? I'm just trying to wrap my head around that sort of diagram.

MR. McLEOD: Well, you mentioned an on and off grid. Most of JUMP Smart Maui is geared towards on-grid demonstration, but I do want to emphasize that the EV part, one of the things that I know we've been thinking about is if you can find places where you can do the EV charge during daytime, so a place where they'd be parked with solar, for example. Then you could bring home an EV to an off-grid situation and basically be bringing home a pretty full battery. You know, our view right now is that EVs, you know, aren't really adding to your kind of energy security in

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an off-grid situation unless they can kind of come to the table with enough of a charge in the battery. But, the honest answer, most of the effort here is focused to on-grid situation. So, this battery right now is actually directly hooked to MECO. So, one of the original purposes of this battery was they weren't sure how many EVs would sell. So, this battery is large enough that it could simulate, for example, 1,000 EVs and what the effect would be on MECO's system. So, in fact, you know, the sales of EVs have been so much better on Maui than they had expected. Part of that battery isn't needed as much as originally. But that was the original idea is this battery is directly on MECO's line. The SVC is directly on a MECO line, but it is a line that's also has a feed from a County solar system; so the thinking was that we were contributing to the stability of a circuit that, you know, we were effecting with solar, and that was the answer on that unit.

CHAIR COCHRAN: Okay. So, it's there to, I guess, assist or enhance the needed energy for the EV sort of program and vehicles and in connection with MECO's lines?

MR. McLEOD: Yeah, the battery kind of simulates what it would be like if there were 1,000 EVs working together, and they can time that, and check how's that going to affect MECO's system, and get them thinking in terms of hey, if we could have those on this part of this system, you know, could we benefit.

CHAIR COCHRAN: Okay. Thank you. And so, what we're looking at here is an extension on an existing license? Is that?

MR. McLEOD: That's correct. Two separate facilities.

CHAIR COCHRAN: Okay, so they've expired and now you folks are looking to extend it through 2019?

MR. McLEOD: That's correct and I see Mr. Ueoka is nodding which I understand to mean he agrees too.

CHAIR COCHRAN: Oh, okay. Mr. Ueoka, did you have something to chime in about?

MR. UEOKA: Oh, no.

CHAIR COCHRAN: Oh, okay, just checking our legal counsel here. And this is, I think, it doesn't really...it's a different, I guess, a unique situation as a license as far as licenses go for this County in the fact, I believe, and maybe if you can elaborate or someone where this is sort of a County/private partnership project versus, you know, I mean, we give licenses to people or leases and what have you but we're not part of that entity in a sense. So...Mr. Ueoka.

MR. UEOKA: Thank you, Chair. I believe, the County is working closely with AEC-USA, but I don't believe we're actually like in a formal partnership. That we do have a Memorandum of Understanding but, I believe, it's not like a binding agreement. But please don't misunderstand that to mean that we're not working closely. The County is working very closely with them.

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CHAIR COCHRAN: Oh, okay. Well, I guess, on the level of it's our lands that the projects are built upon so, okay. Yeah, I mean, I think, it's wonderful and I want to thank Hitachi for I had visited your folk's facilities in Japan and got quite a...and Nissan also. And it was very educational and you folks definitely are leaders in this technology. So, it's no wonder that you folks are here doing your demonstration project and using us as a role model for the rest of the world. And, I think, that's very exciting. So, I want to thank you folks very much for choosing us to be here. And, Members, do we have any further need for discussion or questions, comments for our presenters here today? If not, then I can make my recommendation.

COUNCIL MEMBERS: Recommendation?

CHAIR COCHRAN: Alrighty, thank you. So, I will entertain a motion to recommend adoption of the proposed resolutions entitled "AUTHORIZING THE FIRST AMENDMENT TO BATTERY LICENSE AGREEMENT" and "AUTHORIZING THE FIRST AMENDMENT TO THE SVC LICENSE AGREEMENT", incorporating any nonsubstantive revisions and filing of County Communication 14-236. But before I get the motion, I need to add "revised" proposed resolutions.

COUNCILMEMBER CARROLL: So move.

CHAIR COCHRAN: Thank you, and --

COUNCILMEMBER COUCH: Second.

CHAIR COCHRAN: --thank you very much. So it's been moved by Mr. Carroll, seconded by Mr. Couch. And at this point, Members, any need for further discussion? Seeing none, all those in favor, say, "aye".

COUNCIL MEMBERS: Aye.

CHAIR COCHRAN: Any opposed? No opposed. Motion carries with four "ayes", three excused, and zero "noes", so motion carries. Thank you very much, Members; and thank you very much, presenters.

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**VOTE: AYES: Chair Cochran, Vice-Chair Crivello,
Councilmembers Carroll and Couch.**

NOES: None.

ABSTAIN: None.

ABSENT: None.

EXC.: Councilmembers Guzman, Hokama and White.

MOTION CARRIED.

ACTION: ADOPTION of resolutions.

**COMMUNICATIONS FOR REFERRAL TO THE COUNCIL CHAIR FOR THE TERM
BEGINNING JANUARY 2, 2015, PURSUANT TO RULE 23 OF THE RULES OF THE
COUNCIL**

CHAIR COCHRAN: So, at this time, my next item will be to set all the different items for referral into the next Council term. And I will entertain a motion to recommend that IEM-62, which is what we just voted on, be referred to Council Chair for the term beginning January 2, 2015, pursuant to Rule 23 of the Rules of the Council...oh, wait.

COUNCILMEMBER COUCH: Madam Chair, short recess, please?

CHAIR COCHRAN: Yeah, brief recess. . . .(gavel). . .

RECESS: 2:18 p.m.

RECONVENE: 2:20 p.m.

CHAIR COCHRAN: . . .(gavel). . . Aloha, will the Infrastructure and Environmental Management Committee please reconvene? And so, Members, at this point, I shall now discuss the end-of-term referrals. And I am recommending the following items be referred to Council Chair, for the term beginning January 2, 2015, pursuant to Rule 23 of the Rules of the Council. And it is as follows: IEM-4, Bicycle and Bicycle Tour Safety on Maui Roads; IEM-5, Polystyrene Disposable Food Service Containers; IEM-9, Amending Section 16.26B.101, Maui County Code, to Eliminate Exemptions in the Building Code of the County of Maui; IEM-12, Parking on Kahawai Street (Wailuku); IEM-14, Pavement Preservation Program (Department of Public Works); IEM-27, Restoration of Maui's Coral Reefs; IEM-30, Pollution Reduction Projects in West Maui; IEM-30, oh sorry, IEM-31, Bill Prohibiting Certain Vehicles from Operating on Kuhinia Street (Waihee); IEM-37, Principles of Zero Waste as a Waste Management Policy for

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the County of Maui; IEM-46, Central Maui Pedestrian & Bicycle Master Plan for 2030; IEM-50, Evaluation of the Waiko Road Subdivision Sewer System Project; IEM-51, Bridge-Design Bundling and Related Cost Efficiencies; IEM-53, Information Technology Infrastructure; IEM-55, Definition of Sustainability and Implementation of Section 8-15.3(4) of the Revised Charter of the County of Maui (1983), as Amended; IEM-59, Dedication of Eha Street (Wailuku); IEM-60, Amending Chapter 3.44, Maui County Code, Relating to Acquisition and Disposition of Real Property; IEM-61, Refuse Service for Waikapu Gardens; IEM-64, Prohibiting Parking on Alenui Street and Lana Street (Paia); IEM-65, Acceptance of Bikeway Easements for the Baldwin Park Bikeway Project (Paia); IEM-66, Accepting Dedication of Sewerline Easement for the Dole Administration Building Project (Lanai). Members, these are the Chair's recommendations, may I have a motion to refer the items as stated?

VICE-CHAIR CRIVELLO: So move, Chair.

CHAIR COCHRAN: Thank you.

COUNCILMEMBER COUCH: Second.

CHAIR COCHRAN: Thank you. It's been moved by Vice-Chair Crivello, seconded by Councilmember Couch. And, Members, is there any need for discussion on the said items? Seeing none then, all those in favor, say, "aye"?

COUNCIL MEMBERS: Aye.

CHAIR COCHRAN: Any opposed? No opposition, motion carries with four "ayes", three excused.

**VOTE: AYES: Chair Cochran, Vice-Chair Crivello,
Councilmembers Carroll and Couch.**

NOES: None.

ABSTAIN: None.

ABSENT: None.

EXC.: Councilmembers Guzman, Hokama and White.

MOTION CARRIED.

ACTION: Recommending REFERRAL of IEM-4, IEM-5, IEM-9, IEM-12, IEM-14, IEM-27, IEM-30, IEM-31, IEM-37, IEM-46, IEM-50, IEM-51, IEM-53, IEM-55, IEM-59, IEM-60, IEM-61, IEM-64, IEM-65 and IEM-66 to the Council Chair for the term beginning January 2, 2015, pursuant to Rule 23 of the Rules of the Council.

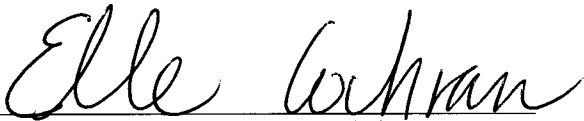
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CHAIR COCHRAN: And, Members, with that, I believe, we have no further business. And happy holidays to all, Merry Christmas, and looking forward to the New Year. And this meeting is now adjourned, aloha. . . .(gavel). . .

ADJOURN: 2:22 p.m.

APPROVED:



ELLE COCHRAN, Chair
Infrastructure and Environmental
Management Committee

iem:min:141205:df

Transcribed by: Delfey Fernandez

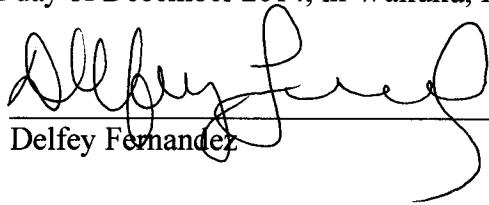
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CERTIFICATE

I, Delfey Fernandez, hereby certify that the foregoing represents to the best of my ability, a true and correct transcript of the proceedings. I further certify that I am not in any way concerned with the cause.

DATED this 29th day of December 2014, in Wailuku, Hawaii.



Delfey Fernandez