ENVIRONMENTAL, AGRICULTURAL, AND CULTURAL PRESERVATION COMMITTEE

Council of the County of Maui

MINUTES

January 7, 2020

Council Chamber

CONVENE: 1:31 p.m.

PRESENT: VOTING MEMBERS:
Councilmember Shane M. Sinenci, Chair
Councilmember Tasha Kama, Vice-Chair (in 1:33 p.m.)
Councilmember Kelly Takaya King
Councilmember Alice L. Lee
Councilmember Michael J. Molina
Councilmember Tamara Paltin (in 2:11 p.m.)
Councilmember Yuki Lei K. Sugimura (in 1:56 p.m.)

NON-VOTING MEMBER:
Councilmember Keani Rawlins-Fernandez (in 2:27 p.m.)

STAFF: Kasie Apo Takayama, Legislative Analyst
Rayna Yap, Substitute Committee Secretary

Zhantell Lindo, Council Aide, Molokai Council Office (via telephone conference bridge)
Denise Fernandez, Council Aide, Lanai Council Office (via telephone conference bridge)
Mavis Oliveira-Medeiros, Council Aide, Hana Council Office (via telephone conference bridge)

ADMIN.: Richelle Thomson, Deputy Corporation Counsel, Department of the Corporation Counsel

OTHERS: Sharon Suzuki, President, Hawaiian Electric – Maui County and Hawaii Island Utilities
Mat McNeff, Director, Hawaiian Electric – Maui County Utilities
Chris Reynolds, Director, Operational Technology, Hawaiian Electric – Maui County Utilities
Mahina Martin, Director, Government and Community Affairs, Hawaiian Electric – Maui County Utilities

His Highness Kaua
Jasee Law
(2) Additional attendees

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

CHAIR SINENCI: . . . *(gavel)* . . . Aloha mai kakou and hau`oli makahiki hou. Welcome to the Environmental, Agricultural, and Cultural Preservation Committee meeting of January 7, 2020. It is 1:32 p.m. I'm Shane Sinenci, your Committee Chair. Before we proceed, may I please ask that everyone disable your cell phone ringers and other noise-making devices. Thank you. Today, we have in Chambers, we're still awaiting on some of the Members, but to my far left we have Chair Alice Lee. Welcome.

COUNCILMEMBER LEE: Konnichi wa.

CHAIR SINENCI: Konnichi wa. Next to her we have Mr. Mike Molina from Upcountry. Aloha.

COUNCILMEMBER MOLINA: Aloha, Mr. Chair.

CHAIR SINENCI: Aloha. And we also have Member Kelly King. Welcome, thanks for being here.

COUNCILMEMBER KING: Welcome. Aloha.

CHAIR SINENCI: Aloha. We also . . . we're awaiting on Ms. Kama. She's en route. And also Member Paltin will be here shortly. We also have Members Hokama and Rawlins-Fernandez whom are non-voting Members but are always welcome to attend at their leisure. Today, we have representatives from . . . Ms. Sharon Suzuki, President of Hawaiian Electric [*sic*]. Welcome.

MS. SUZUKI: Good afternoon.

CHAIR SINENCI: Good afternoon. We also have Mr. Mat McNeff, Director of Hawaiian Electric, Maui County Utilities. Welcome, Mat.

MR. McNEFF: Thank you.

CHAIR SINENCI: Also, Mr. Chris Reynolds, Operational Technology of Hawaiian Electric. Welcome, Mr. Reynolds.

MR. REYNOLDS: Thank you.

CHAIR SINENCI: And, also, Mahina Martin, Director of the Government and Community Affairs. Welcome, Ms. Martin. For our Staff here, from Corporation Counsel, we have Ms. Richelle Thomson. Mahalo for being here. We have Kasie Apo Takayama, Legislative Analyst; Rayna Yap, Committee Secretary. And then our District Offices, we have Mavis Oliveira-Medeiros in our Hana Office; Ms. Denise Fernandez in our

Lanai District Office; and Ms. Zhantell Lindo at our Molokai District Office. Members, today we have EACP-17(4), 100 Percent Renewable Energy. And we'll begin with testimony today. For individuals testifying in the Chamber, please sign up at the desk outside the Chamber door. And if you're testifying from one of our remote testimony sites, please sign up with the district office staff. Testimony is limited to our item that's agendized today. And pursuant to the Rules of the Council, each testifier will be allowed to testify up to three minutes. When testifying, please state your name and the name of any organization you may be representing. Pursuant to the Rules of the Council, if you are a paid lobbyist, please inform the Committee. We have established a connection to our Council district offices. So, with that . . . oh, I wanted to welcome Ms. Tasha Kama our Committee Vice-Chair.

VICE-CHAIR KAMA: Good afternoon, Chair.

CHAIR SINENCI: Good afternoon. Thanks for being here.

VICE-CHAIR KAMA: Thank you.

. . . BEGIN PUBLIC TESTIMONY . . .

CHAIR SINENCI: So, Ms. Apo Takayama, would you like to call the first testifier?

MS. APO TAKAYAMA: Thank you, Chair. Our first testifier is His Highness Kaua.

MR. KAUA: Aloha.

CHAIR SINENCI: Hello.

MR. KAUA: I'm Highness Kaua, also representative, counselor, advisor, war captain, also becoming the premiere minister of God in Hawaii. So we're looking to be recruiting, like I said before, pertaining to environmental, which is our sky and our water and our land that we're on. So being Maui Electric and also Hawaiian Electric, you're on our land and you guys are here as a corporation doing business here under United States, serpent states. And snakes stay in Hawaii, illegal as it is. So because we are recruiting to be within our government, our kingdom government, remember this, I'm pure-blooded European, pure-blooded English, pure-blooded Asian, pure-blooded Kanaka. Pure, pure, pure as you all ladies, they can see each other right here and right now that it becomes to a real resolution. The real resolution is not but manmade claim to the land and the sky, it doesn't work that way. It only works within the Father's favor and that's it. So now we'll be known within the Kingdom territory, and we will be closing down roads. We're recruiting now, recruiting for the Kingdom of Hawaii. So I'm letting you know right now that we going do a campaign all the way to the year to state every single moment that there is pertaining to all us people and that's it because already, they doing things already. So, I love you guys and I see you guys later. Take care.

CHAIR SINENCI: Mahalo, Mr. Kaua, and mahalo for providing us with some opening statements for our EACP Committee.

MR. KAUA: We'll be back again. Got to go.

CHAIR SINENCI: Mahalo nui.

MR. KAUA: Aloha. Oh, my hat.

CHAIR SINENCI: Ms. Apo Takayama, do we have any more testifiers in the Chambers?

MS. APO TAKAYAMA: Chair, there's no further testimony from our district offices or in the Council Chamber.

CHAIR SINENCI: Okay, mahalo. So, Members, seeing that there are . . . oh, we have one more, Mr. Law.

MR. LAW: Jasee Law from Kula. I was wondering if all you brilliant people know what $E=mc^2$ means.

CHAIR SINENCI: Okay. Any scientists in . . . I believe it's Einstein's law, energy equals mass times the speed of light. Thank you, sir. Okay. Just for your information, FYI. Okay. So, Members, seeing that there are no more individuals wishing to testify, without objections I will now close public testimony.

COUNCILMEMBERS: No objections.

CHAIR SINENCI: Thank you.

. . . END OF PUBLIC TESTIMONY . . .

EACP-17(4) 100 PERCENT RENEWABLE ENERGY

CHAIR SINENCI: Okay. So. our item today is EACP-17(4), 100 Percent Renewable Energy. And, so at the close of 2019, I agendized this item in the EACP Committee and we heard from members of the Administration what Maui County is doing to work towards 100 percent renewable energy. Today, in accordance with Rule 7(B) of the Rules of the Council, my intent is to receive a presentation from representatives of Maui Electric Company and Hawaiian Electric Company so that we may receive a similar update on a bit of a . . . at a larger scale. Each representative here today has specialized knowledge and experience, which will be valuable to our conversation on the agendized topic as they are prepared to update us on their progress and plans for achieving 100 percent renewable energy and other related matters for Maui County. If

there are no objections, your Chair would like to designate these representatives as resource persons in accordance with Rule 18(A) of the Rules of the Council.

COUNCILMEMBERS: No objections.

CHAIR SINENCI: Mahalo, Members. I'll now turn the floor over to our representatives. And before beginning, may I please ask that you state your names and titles for the record.

MS. SUZUKI: Good afternoon, Chair Sinenci and the Members of the Environmental --

CHAIR SINENCI: Good afternoon.

MS. SUZUKI: --Agricultural, and Cultural Preservation Committee. I'm Sharon Suzuki, Hawaiian Electric's President of Maui County and Hawaii Island Utilities. Joining me today are Mahina Martin on my far left, Director of Government and Community Affairs; Mat McNeff, next to me, Director of Maui, Molokai, and Lanai; and Chris Reynolds, to my right, Director of Operational Technology. We'll be sharing what we've been doing to transition to 100 percent renewable energy future and what we're doing to transform our business in a way that we can serve our communities and our customers on five separate island grids. It's really an exciting time for us, because a lot of this has not been done before. And it's exciting not just as an operating power utility but we're really involved in engaging in energy discussions with stakeholders, our communities, testing emerging technologies and working on public policies to help get us to that future, renewable energy future in the coming decades. We will begin with a formal presentation followed by a session for questions and answers. So, at this time I'd like to turn the program over to Mahina.

(PowerPoint Presentation)

MS. MARTIN: So, as you may be aware, we've been around for a while. We are actually celebrating our 99th year of serving Maui, Molokai, and Lanai; but few people know that we actually have ali'i roots. And we like to tell this story because it's such an unusual trivia in an aspect of our history we're quite proud of. King Kalākaua, in the 1800s, had heard about Thomas Edison and took a voyage to, at the time, the Mainland to learn a little more about this thing called the electric light bulb and how electricity was made. And in 1881, it made its appearance here on Maui. In fact, making Maui the first place to actually have electric lights demonstrated in Hawaii. In 1886, 'Iolani Palace become the first royal residency in the entire world to actually be lit up by this new thing called electricity. And for Maui Electric, we opened our doors and began business here in 1921. And today, as we enter 2020, you know that we've transitioned to using one name from Maui Electric to Hawaiian Electric as a front name. It's a way for us to align our operations. It allows for best practices for greater efficiency. And, as important, it reflects not just the name Hawaiian Electric that we're a company that does business in Hawaii, but we're actually of Hawaii; and that's an important part for us, the fact that we serve five islands here in our state. We are, you know, proud to be of Hawaii. Our employees are generationally part of Hawaii,

and so we're proud to recognize that and celebrate that as we become . . . using a common name of Hawaiian Electric. As a utility, we serve 72,000 customers both residential and commercial. The breakdown you see on this screen and in the handout offered to you today: on Lanai we have 1,700, while Molokai we serve a little over 3,000 of our customers there, and on Maui the vast majority of our customer base is here at a little over 67,000. We're regulated by the three-member Public Utilities Commission as an investor-owned utility. We are a company that serves . . . there are three islands with 350 employees. And as I mentioned earlier, we have generations of families that have worked through us: uncles, cousins, but fathers, moms and their children have come through as employees as well. I don't have to tell you that Maui is experiencing immense growth and aside from over 45 projects being expected here, you know, our population is growing. We went from 71,000 just in the '80s and as you can see by the State DBEDT's projections in 2045 we are well . . . projected to be reaching well over 200,000 residents here on Maui. Of the 45 projects expected energy demand, energy use will increase as we can imagine. We noted a few here. They're known throughout our island. There is Maui Business Park as well as Kihei High School and we have developments both in the commercial side, the resorts, as well as residential subdivisions and neighborhoods coming up over time. One thing that I'd like to point out that's changing is also the lifestyle use. We are not the same community. We are not the same society or consumers of power, so everything is so dependent on power that when we talk about providing energy, we really are affecting the lifestyles of our community and our businesses. Today you're going to hear how we're taking steps moving towards creating a more renewable energy future and we wanted to share with you a little bit about what guides us. There are, you know, electricity and providing it and generating it is very complex, but what's important to us, that we know allows for us to not just be a successful business but meet the current needs, is that as we're moving forward renewable energy is becoming our first option. We're doing our best to ensure that we can meet that future need and transform accordingly. But transformation means it will include everyone. It cannot just be us. There's so many breakthroughs happening. If we advance too quickly, we must be thoughtful and mindful of all things considered because today's decisions must make use of the best available today but breakthroughs coming up in the future as well, modernization, making sure that our lights stay on, and, of course, addressing the issues and the needs of climate change. Clearly there is no perfect choice but if we stay diligent on these planning principles, we intend to do our best. When we're talking about meeting a renewable future there are so many different challenges. Many people know electricity to be just go to the light switch, flick it on and power comes on. But what's behind that and making that transformation and changing to 100 percent renewable future is really a lot of different factors and just to raise that for the attention of everyone, you know, really we're looking at the issues behind cost and the impacts of land use. It's quite complex. When we're talking about cost, you know, we say renewable energy can bring cost savings and there's an expectation that maybe customer savings will be immediate. You know, you put up the project and costs will go down. It's a little more complicated than that certainly. These are large investments. New emerging technologies are being used and addressed. With the need for changing to large scale renewable energy

projects, land use requires, large land use is required. So, we are starting to see projects coming in that are being proposed and it's necessary that they actually use land mass that's going to be more than most of us have seen in our recent past or in our past. And one consideration for us always is the impact and the acceptability to our customers and our community that we serve. There are many things to consider. The environment, its proximity to community, is it reasonable, what kind of technology is being used, and what is the cost. Can the public accept those changes as we make this transformation? And few people understand the complexity of our regulatory requirements as well as the operational and technological requirements. We must also ensure that we can do this safely and reliably and we must also meet the requirements of the State Public Utilities Commission, a three-member body that serves as appointees of the Governor. I am going to turn this over to Mat who is going to talk a little about exactly how do we keep our islands powered and a little bit about our operations.

MR. McNEFF: Thank you, Mahina. Okay. So, a few definitions before we get started. So, one megawatt is a term of power that we use frequently and it's enough to power about 100,000 compact fluorescent lights or about 800 average homes on Maui. And one megawatt hour is one megawatt over the duration of one hour and that's a measurement of energy. So, about how much energy do we use on Maui? We use about 20,000 megawatt hours per week and the highest peak that we saw last year or the instantaneous highest demand was about 209 megawatts. For Molokai and Lanai, they are both similar-sized grids, they use about 600 megawatt hours per week and the peak was just about six megawatts for both of those islands. For Maui, we have about 250 megawatts of firm generation. And firm generation is generation that we can call on anytime and we have control over and then we also have as-available generation. And that's generation that's typically dependent on some resource such as wind or solar, and energy is only produced when that resource is available. So, again about 250 megawatts of firm generation on Maui. Most of that is at the Maalaea power plant, about 212 megawatts. We have, you know, about 34 megawatts at Kahului power plant and two megawatt units in Hana. As far as as-available, we have about 51 megawatts of wind power at Kaheawa 1 and 2 and Auwahi, the one on Ulupalakua is another 21 megawatts. That's a total of 72 megawatts of wind. We have two, just around three megawatt solar facilities. One in South Maui and one in Lahaina and then we have over 100 megawatts of privately owned rooftop solar. For Molokai, we have about 12 megawatts of firm generation; that's at the Palaau power plant. And for Lanai, we have about 9.4 megawatts at the Miki Basin power plant and a combined heat and power unit at Manele Hotel. As far as as-available on those islands we're working with Molokai New Energy Partners for a 2.7 megawatt solar plus battery facility on Molokai that's currently awaiting construction. And then on Lanai we've had a 1.2 megawatt solar facility for a while. And combined, both those islands have about three megawatts of rooftop solar. So, as several have mentioned today, you know, our goal is to get to 100 percent renewable energy by 2045, and by 2020 the goal was to get to 30 percent. I am happy to say for Maui County, and these are actually 2018 numbers, we were at 38 percent renewable. And, you know, 38 percent is what we averaged over the 2018 year, but occasionally it's even higher than that.

You can see for some time in April we were at 80 percent renewable. So, you know, because a lot of the renewables is as-available, it kind of depends on whether it is windy and sunny. And just to put that in perspective, so in 2007 we had about 370 rooftop solar PV systems; and compare that to 2019, where over the five islands we had about 80,000. You know, and so I mentioned, we had about 38 percent renewable RPS in 2018. In 2007 it was about 14 percent. So, we've really come a long way in the past decade and we're not stopping there. We've taken actions in the last few years to get us to the next level. So, in 2016 we asked major landowners across the County if they would be willing to have renewable energy facilities on their land; and in 2017, we issued a request for proposals for additional renewable energy. Out of those requests for proposals we signed two purchase power agreements for two different facilities, both PV both with batteries. One is a 60-megawatt facility in Central Maui and the other is a 15 megawatt in South Maui. And then just last year we issued another request for proposals, this one Maui, Molokai, and Lanai. So, this is one of the two projects that came out of the 2017 RFP. This is the AES facility. It's a 60-megawatt solar facility and we anticipate this to, you know, reduce the amount of fossil fuels we need to burn every year. We're going to purchase the electricity at eight cents per kilowatt hour and it's planned to start construction this year and be in service no later than 2022. The other, the 15-megawatt facility in South Maui, is currently still undergoing the regulatory process. And you know, all of this increase in renewable energy means we burn less fossil fuels and that means, you know, less greenhouse gasses and prices are more stable. You can see we've already hit our 2020 target of a reduction of 16 percent in greenhouse gas emissions and we hit that in 2014. And then you guys have probably heard that we're planning on retiring the Kahului Power Plant by 2024. That's about 34 megawatts of firm generation and part of the RFP we requested last year was to replace that energy. You know if . . . we asked for about 295,000 megawatt hours per year. And if that were to be all solar it would be about 700 acres of solar panels, you know, or approximately 14 War Memorial Stadium complexes. Okay, now I will hand it over to Chris to talk about modernizing the grid.

CHAIR SINENCI: Mr. Reynolds . . . did any of the Members have any immediate questions or would you guys like to wait until the end of presentation? Okay, we'll wait until the end. Mr. Reynolds?

MR. REYNOLDS: Thank you, Mat. Our grids are evolving as we transition to a renewable energy. To ensure that our existing systems remain safe and reliable, we're automating more equipment, we're deploying advanced protection devices and we're collecting more system data to enable future improvements. We are continuing to develop, we are continuing development of an integrated grid plan with input from six working groups that will have a more comprehensive outcome than if we were to do it alone. The IGP process, integrated grid planning, consists of a stakeholder council; a technical advisory panel; four groups focused on distribution planning, forecasting, resiliency and market analysis. Still, our system is at risk. And one of our biggest risks is vegetation. We have a number of outages due to trees, trees and branches coming into our equipment. Last year we spent $3.2 million on Maui, Molokai and

Lanai clearing vegetation and keeping it away from our existing equipment. We are working on strengthening our system. Aside from just doing our normal poles, overhead wires, and underground cable replacements, we are piloting a new type of aerial cable which is insulated. We've installed it up in the Olinda/Piiholo area where there is outages typically due to trees coming down across our lines. From this picture you can see a tree kind of laying right across the lines; but since this cable is insulated, customers up there power stays on and we were able to go up there when we need to and clear that tree safely. This was installed in 2019 and it was a success and now we are looking at deploying it in West Maui and on Molokai, East End. Wildfire is another big risk to our system. As we've seen in the past couple of years, there has been extensive damage on Maui alone. So basically we are taking steps to mitigate wildfire risks through the use of drones to survey the areas. We participate in a wildfire task force with State, County and private agencies. We use the application of fire retardant on our poles. We maintain firebreaks and we remove the fuel that is used to feed into the fires such as downed trees and brush. With that I'd like to turn it over to Sharon.

MS. SUZUKI: Okay. Thank you, Chris. So, in closing, you know, we've been working in collaboration with the County, the State, our community and our customers and we certainly look forward to doing more of that as we move forward to a renewable energy future. And we're very proud to be part of the Maui County community. Like Mahina said, nearly a century, right. So, we provide safety training to the Police, the Fire, Public Works, as well as taking it into the schools through our safety education program. And we also believe in giving back to our communities. So, Maui Electric gives charitable contributions on the order of $150,000 a year to non-profits to help in different areas. And through fundraising and payroll deductions, our employees contribute 60,000 or little more every year towards Maui United Way that supports many agencies that support those who are in need. We also spend about $10 million here locally on goods and services. And last year we had an annual franchise tax that was provided to the County on the order of $8.9 million. So, we really appreciate working with everyone in the community, working with all of you. We appreciate the support of the Council and the Administration and we certainly look forward to many more years of collaboration. So, this concludes the formal presentation part of our program and we'd like to open it up to questions.

CHAIR SINENCI: Mahalo, Ms. Suzuki, and Chair would like to recognize Ms. Yuki Lei Sugimura.

COUNCILMEMBER SUGIMURA: Good afternoon, Chair.

CHAIR SINENCI: Welcome. We had a question from Chair Lee.

COUNCILMEMBER LEE: Thank you. Sharon, could you explain that $8.9 million again, franchise tax?

MS. SUZUKI: So, we collect franchise taxes for the State, the Public Utilities as well as for the County, and that was last year we collected $8.9 million that goes towards you folks . . . or to the County to fund programs.

COUNCILMEMBER LEE: To the County General Fund or what part of the County?

MS. SUZUKI: I don't know exactly where in the County it goes. So, actually the franchise tax is in lieu of us paying property taxes.

COUNCILMEMBER LEE: I see. I see. Okay. Thank you.

CHAIR SINENCI: Thank you, Chair Lee. Member Molina?

COUNCILMEMBER MOLINA: Thank you, Mr. Chairman, and good afternoon and thank you for the presentation. Just a quick question on the Kuihelani Solar project that will provide clean energy to 27,000 homes and Paeahu Solar which will serve 7,300 homes. The homes that these projects are expected to benefit, will they be chosen countywide or are they specific to any particular area on the island?

MR. McNEFF: So, the energy will just feed into the grid so everyone will benefit from that electricity. Both the renewable aspects as well as the, you know, the lower price will be factored into everybody's. . .

COUNCILMEMBER MOLINA: Okay, so, but the homes itself are there any specific area you're targeting?

MR. McNEFF: No.

COUNCILMEMBER MOLINA: Just countywide then, yeah?

MR. McNEFF: Yeah.

COUNCILMEMBER MOLINA: Oh, okay. And then what kind of savings will the households potentially could realize from these projects?

MR. McNEFF: I am not sure. Yeah, we can get back to you.

COUNCILMEMBER MOLINA: Yeah. So basically they have a smaller electric bill then after all of this, I assume, right?

MR. McNEFF: Kula households, is that what you asked?

COUNCILMEMBER MOLINA: Well no. You know, the savings at, you know, from this project --

MR. McNEFF: Yeah.

COUNCILMEMBER MOLINA: --the savings benefit that these households . . .

MR. McNEFF: Sure. And so any purchase power agreement that we enter into we do sort of a long-term forecast - 20, 25 years; and that takes into account what the fossil fuel price is forecasted to be and that's how we calculate what the savings will be over that time. So, I mean it has to be that it will show savings to the customers for us to enter into a contract.

COUNCILMEMBER MOLINA: Okay, good to see the end result of the savings. Also I just wanted to say thank you on behalf of my staff too, I guess, we did get a call out from a citizen in the Haiku area concerned about, I guess, a tree branch matter and power lines and you guys were just right on it really fast so I want to thank you for that. Chair, I have a couple more questions, but I will yield the floor and --

CHAIR SINENCI: We'll do a couple rounds.

COUNCILMEMBER MOLINA: --we'll do a couple rounds. Yeah. Thank you.

CHAIR SINENCI: Thank you.

MS. SUZUKI: I'd like to clarify your question about the number of homes. We use that as a way to gauge. It's the total. . . the energy used by that many homes or that would be the equivalent energy used by that many homes is what the size of the project is. So, it's a way for us to try to translate the megawatt hours into something that more people and residents can understand.

COUNCILMEMBER MOLINA: Thank you.

MS. SUZUKI: Does that help?

COUNCILMEMBER MOLINA: Yeah.

CHAIR SINENCI: Okay. Thank you. Member King?

COUNCILMEMBER KING: Thank you. I'll try to keep it to just a couple so you can go back to another round. But thank you for being here. It's always great to see the faces from MECO. I am trying to wrap my head around how we are going to identify you as separate from Hawaiian Electric now that you are all one big company. Are you going to have an Hawaiian Electric Maui, Hawaiian Electric . . . anyway that's part of the question but I also wanted to . . . I just visited with Kelvin Kohatsu over the holidays, and is he going to continue to oversee all the fleets on all islands then?

MS. SUZUKI: Yes, to the second question. Kelvin is our Director over fleet operations for Hawaiian Electric and covering all, serving all five islands. So, yes, he will continue in that role. Our name is we want to brand it Hawaiian Electric so technically we're still

separate legal entities doing business as Hawaiian Electric; but we wanted to use, I think Mahina mentioned it, to show the unity across the five islands that we serve. And we're sharing more and more resources, finding more consistent procedures, policies. And I think the big one is to leverage the economies of scale by having same standards, same type of equipment, right, when we purchase items so we can bring more savings to all of you and our customers.

COUNCILMEMBER KING: Okay, so when we talk about it, it will be Hawaiian Electric, you won't be using MECO anymore?

MS. SUZUKI: Get away from that.

COUNCILMEMBER KING: Okay. And I had a couple of other questions. One was when you are talking about firm generation versus as-available, at what point are we going to transition solar with, you know, the battery solar into firm? Or will it ever be considered firm power?

MR. McNEFF: I think as we get more and more of it, it will be, in fact, you know, all of the solar facilities that I talked about since the 2017 request for proposals required to have batteries for four hours. You know so, it's definitely making it more and more firm. You know there still are some services that firm generators provide that inverter-based generators don't, aren't quite there, and whether those inverters evolve to provide those services or we add additional pieces of equipment to provide those services, you know, is yet to be seen but --

COUNCILMEMBER KING: Okay.

MR. McNEFF: --we're definitely getting there.

COUNCILMEMBER KING: Oh, okay. So, we're not quite there yet. That was one of my questions. And then the other thing I wanted to bring up is kind of more of a comment but I really wanted to thank you folks for where you've gotten to because when the Hawaii Clean Energy Initiative was passed back in 2007 I think it was, and everybody was saying we can't set these goals for 70 percent reduction because we don't have a plan. But we set the goal and then you guys came up with a plan and then the same thing happened when Governor Ige got into office. He went to a 100 percent renewable by 2045 and everybody said the same thing and, you know, even the Hawaii Energy Policy Forum which I was on at the time was pushing back against it. Well, we have to have a goal in order to develop the plan so that goal . . . you guys are ahead of where you need to be to reach that goal and I think that just, that's kind of proof that, you know, if we don't set the goals we're not going to get there because people said that the Hawaii Clean Energy Initiative was crazy and now we're way past that. So, I just kind of wanted to make that comment that I really appreciate . . . I also think that we should look at trying to move up even quicker if we can because, you know, now that we have our Climate Action Committee and we're looking at 2045 we're done. You know we're going to get there in 2045 but if we don't

get there sooner we're going to be in major, having major problems in 2045, so I just support whatever you guys can do to get there faster and thank you for putting that effort in. And I think one of the things that really impressed me about the electric company is that when that goal was set for 100 percent, as soon as it made it into State statute, you guys start going. It was like there was so much talk about, you know, we can't . . . if we don't have a pathway there we can't set that goal. Once that goal was set then you guys started working on the pathway so that's how we're going to get to what we need to get, is people understanding that we don't have to necessarily know every step of the way when we set a goal. We have to set the goal first and then figure out how we're going to get there. Thank you, Chair.

CHAIR SINENCI: Thank you, Member King. Member Sugimura, you had any questions?

COUNCILMEMBER SUGIMURA: Thanks. Nice to see all of you here in force. Appreciate your good work as everybody is saying and I'm wondering about the, what's happening with the Hitachi JUMPSmart Maui and electric vehicle and where are you, I guess I can't call you MECO anymore, but HECO on it, with the evolution of the electric car?

MS. SUZUKI: So, the JUMPStart [*sic*] Maui program ended and the electric vehicle charging infrastructure is owned currently by Maui Economic Development Board and they had an Operating Agreement with Hitachi America which ended at the end of last year in March. So we had proposed to take over four of the charging stations and we had some . . . it is subject to the Public Utilities Commission approval so that's where it's at. We are awaiting approval from the PUC.

COUNCILMEMBER SUGIMURA: So is, are you as an organization planning to push the electric car aspect of that program? I mean not that Hitachi's gone but, do you have a plan to put up more charging stations or are you just . . .

MS. SUZUKI: I guess, yes, because we filed as Hawaiian Electric for all five islands an electrification of transportation road map. I can't remember exactly when that was filed. I think it was early 2019. So, that set forth kind of a path forward for us to . . . and it's not necessarily for us to own, right, but it also identified a need for a kind of backbone infrastructure on the different islands and I think it was pretty agnostic to who would own that infrastructure. So, our proposal to take over the charging infrastructure is aligned with that, but I guess it's not necessarily for us to own all of them. It's open to others to install and own charging. Of course, it's to encourage, you know, the benefits of electric vehicle adoption in our islands where maybe the mileage or distances that we travel are very suited to electric vehicles, especially with the ranges increasing and, of course, it's clean transportation and to the extent that electric vehicles can be charged in the middle of the day when there is an abundance of photovoltaic energy available, it helps us to integrate more renewable energy into the grid. So, it's kind of a win-win for . . . in many aspects.

COUNCILMEMBER SUGIMURA: That's good to hear. I wondered. I know the amount of energy that Hitachi had put in and the amount of resources that they brought here

and then when they left it was oh, scary, who was going to, you know, it's really an expense and I kind of naturally thought it would probably be, you know, you. So, you're picking up some and Maui Economic Development Board is basically carrying the load for the rest?

MS. SUZUKI: It would be transferred back to the property owners and left up to them on what to do with the infrastructure. And the four locations we selected or proposed are . . . we think are strategically located across the island, so Lahaina, South Maui, Central, and Upcountry.

COUNCILMEMBER SUGIMURA: Yeah, I would love to see that all develop into more but it's going to take a lot. So, thank you.

CHAIR SINENCI: Mahalo.

COUNCILMEMBER SUGIMURA: I'll yield.

CHAIR SINENCI: Mahalo. Vice-Chair Kama, do you have any questions? I have a question. So, Hawaii Electric has been in the news of late and there was two articles that came out in the paper regarding Hawaii Electric. The first one talked about the Pulama Lanai's interest in buying the Lanai's electric utility and the second was about geothermal energy on the Big Island. So, I just wanted to ask if anyone had any comments about that expansion albeit on other islands?

MS. SUZUKI: Sure, I would be happy to take that. So, first for Pulama Lanai, they have expressed interest in the possible purchase of the utility on Lanai only and that's because their . . . it aligns maybe with their next step after doing a couple micro grids at major locations like the Manele and the Koele Resorts. And we're . . . it's really in the very, very early stages so they've expressed interest. We're in exploratory discussions at this point so the timeline is very, you know, unknown. On the, your second question about Puna Geothermal. So, Puna Geothermal closed with the lava eruption on Hawaii Island in 2018, right, yeah '18, so we worked with PGV to work on a rebuild agreement because they are interested in coming back online. So, what was announced was the amended and revised purchase power agreement between Hawaii Electric Light and Puna Geothermal. It's at a lower rate and includes an expansion portion, so with the expansion portion I think it was about, subject to check, $13 per month savings beginning in 2022. So, the purpose of renegotiating was to try to lower rates to the Hawaii Island customers. Given that through our request for proposal process we're seeing very competitive renewable energy rates to buy the energy from these third-party providers, so that was I think what we announced in the release. Are there any further questions?

CHAIR SINENCI: Mahalo for that. Chair Lee has a question.

COUNCILMEMBER LEE: Thank you, Mr. Chair. I was just wondering if, do you have new technology to make renewable energy like the PVs more affordable to affordable

homes? Like for instance maybe what the average person buys now something to a lesser degree but still renewable as, so do you have a product like that or do you have like in for a housing, sometimes we save money through clustering the housing. So, do you have like a grid that people can share or something like that or can the County put in basic infrastructure to help subsidize the energy for those homes?

MR. McNEFF: So, with the first part, we don't have any technology that, you know, is a lesser form or anything like that, but prices, I mean as PV prices continue to drop so, I mean they are getting lower all the time just by the nature of, you know, things getting cheaper. As far as, you know, maybe customers affording something, we have several programs. One is like the community-based renewable energy program, and the idea is that someone is going to install a larger renewable energy project, not on somebody's rooftop but larger than that, and then customers can kind of buy into it. And so, you know, it's good for customers that maybe live in apartments or, you know, don't have roof space themselves and then they can purchase into that and receive the benefits of the solar without actually having to have it on their roof.

COUNCILMEMBER LEE: Okay. So, can we have information on that because as we plan housing projects for the lower income families or the workforce families, sometimes, you know, they want to be a part of this too, this movements as well, but possibly can't afford it. And the other thing is do you do any financing? For PVs?

MR. McNEFF: Hawaiian Electric.

COUNCILMEMBER LEE: Yeah.

MR. McNEFF: Hawaiian Electric, we don't do any financing ourselves, but we can definitely get you information on the community-based renewable energy.

COUNCILMEMBER LEE: Okay, great. Thank you.

MR. REYNOLDS: Hi, I would just like to add probably one of the best paths forward for reducing energy costs is actually conservation. So, LED light bulbs, tremendous breakthrough in energy savings, high efficiency cooling systems, insulation in homes, you know, a lot of that, even designing homes so they actually were built for tropical climates such as Maui as opposed to some mainland where it offers no shade and you are getting direct heat. So, there's a lot of ways that customers can reduce their footprint and minimize their bill so when they do come in and ask, you know, try to get a PV system, they won't need a really big one. They'll need one just for that small footprint they have.

MS. SUZUKI: So, a lot of solar contractors offer financing. There are lease arrangements and that's how I think it helped spur the growth in rooftop systems being installed because a lot of them offer no money down arrangements, right, but you're paying over time to help pay them back, but it's just another . . . I mean it is a form of financing.

COUNCILMEMBER LEE: Thank you.

CHAIR SINENCI: Member Molina?

COUNCILMEMBER MOLINA: Thank you, Mr. Chairman. With regard to your presentation, the slide with 100 percent renewable energy and the goal of 100 percent by 2045, and it says here it is one of the nation's most ambitious energy goals. What is part of your plan to make you believe that we can reach this 100 percent goal by 2045 because that's 25 years from now? What's part of the plan, or what are you seeing right now that we can reach this goal in 25 years?

MR. McNEFF: Well, definitely some of the steps I mentioned in the slides that we've already done. So, we went out for proposals in 2017 and that is going to produce 75 megawatts. We signed purchase power agreements for 75 megawatts of additional solar on Maui and then just last year we went out for another RFP, you know, for 295,000 megawatt hours a year which is significant. So, I mean we have quite a bit of renewable energy projects that we anticipate coming on say within the next five years. So, I mean at that point, I imagine, I don't know exactly where we will be, and it will probably vary from year to year, but we may be in the 70s or 80s, around there.

COUNCILMEMBER MOLINA: That's good. You shoot for the stars, yeah. Well, I hope all of us are around in 2045 to celebrate with you. Anyway, and the next topic is something that is both fascinating and scary to me, your slide on drones, usage of drones for wildfire mitigation. Tell us how, more specifically, how you're using the drones because, you know, it's . . . for some people it's scary when they see these things flying around and what they are used for. So, I guess, these are used to go into areas where, you know, human beings can't go or it's dangerous for them to go and explore. Can you elaborate a little bit more on your use of drone technology?

MR. REYNOLDS: You're correct on that. We use drones where we really can't access through either vehicle or even ATV so, basically, we've been flying drones in the West Maui Mountains. Staying, you know, we stay away from neighborhoods. We don't focus the camera on homes or, you know, private property. We kind of stay within the easement and we just basically fly up there. Our pilots for these drones now are actually, receive certification from the FAA so they file a flight plan before anything leaves the ground. You know, we have kind of a corporate policy what we can video and what we do not video. We send out public notifications, you know, telling people in the area that we're going to be here and we're going to be flying a drone. So, we really try to do our best to inform the public and reassure them that we are there strictly for utility line observation and nothing else.

COUNCILMEMBER MOLINA: That's good to know. Thank you. Thank you, Chair.

CHAIR SINENCI: Thank you, Member Molina. Chair would like to recognize Member Paltin. Mahalo for joining us.

COUNCILMEMBER PALTIN: Aloha auinala. Sorry I am tardy today, prepping for tomorrow; and sorry I missed your presentation but I did have a question dovetailing off of Member Molina. How long ago did the drone program begin?

MR. REYNOLDS: So, we started our drone program just last year with our first employee becoming certified in early '19. Since then we've had four more towards the end of 2019 actually get certification and put in the training hours.

COUNCILMEMBER PALTIN: So, this isn't replacement of the Brush Abatement Program?

MR. REYNOLDS: This kind of is an additive so we can basically now fly these lines. Instead of doing helicopters or foot patrols we can get a better idea of what's out there. So, if we see an accumulation of fuel around our poles, we can actually send crews out to clear that.

COUNCILMEMBER PALTIN: And do you have . . . what is the current status of the Brush Abatement Program?

MR. REYNOLDS: So, basically, we've been working with the West Maui Wildfire Task Force and we've been partnering with DLNR on quite a few projects that they've been receiving government grants on. So, we've done the fuel abatement project back in 2018 and last year we worked with DLNR on the firebreak or the road maintenance that allows . . . basically not only stops the fire from traversing too far but also allows emergency vehicle access too. So, right now we're just in a, we're going back, we're videotaping those lines on the West Maui Mountains and seeing what fuels are there and then from that assessment we'll do another, look at fuel abatement.

COUNCILMEMBER PALTIN: So, 2019 had no fuel abatement?

MR. REYNOLDS: Correct.

COUNCILMEMBER PALTIN: And 2018 had fuel abatement?

MR. REYNOLDS: Yes.

COUNCILMEMBER PALTIN: Okay. Another question I had was, it might be a little bit off topic, but you know safety is a big issue in Lahaina. We recently had a pedestrian death. And I know that if the lamp post isn't working you call MECO but if there's trees kind of blocking the light of the lamp post to shine on the crosswalk like at Times, Honokowai, who addresses that?

MR. REYNOLDS: That's actually kind of a good question and it would depend whether it would be the responsibility of the property owner to do that. I mean it would fall in the same line as a tree branch growing in front of the stop sign. So . . .

COUNCILMEMBER PALTIN: But if the tree branch grows into your wires is that still the property owner?

MR. REYNOLDS: No. When it grows, when a tree branch comes so close to high energy or high voltage lines like that you have to have special qualifications, you know, and according to OSHA and HIOSH law, you need to have training to be able to mitigate that when you work within so many feet. So, that's why, you know, our crews will go in there and clear branches away or we have Asplundh come in as a contractor who have certified employees that can work near high voltage lines.

COUNCILMEMBER PALTIN: So, just because the lamp post it's not dangerous to work near then it's the property owner?

MR. REYNOLDS: Correct.

COUNCILMEMBER PALTIN: Okay. Thank you.

CHAIR SINENCI: Thank you, Member Paltin. Member King?

COUNCILMEMBER KING: Thank you, Chair. You know on that issue of whose responsibility, I just wanted to point out that one time in my life since I've lived in the house we're in almost over 30 years, but I saw a County truck out there actually trimming trees from my yard that were going over the sidewalk and it was Public Works. And I ran out there because I was a little worried that I was going to get charged for this, and I hadn't ordered any service. And they said no, no, this is your tax dollars at work. So, they said no we come in if we see like trees going over public property. It's only ever happened to me once in like the last 20 years sometime. So, I don't know, maybe that's a question for Public Works, like at what point do, you know, I don't know, maybe that was an election year and they decided to go out and trim everybody's trees, I am not sure, but I was really impressed with it but then it never happened again. So, it would be kind of interesting to see if there is a plan in Public Works for trimming trees that extend onto public property. Because no one came in and told us to do it, they just were out there doing it. But I do have a question about the trees because in my first term we approved, the Council approved funding to remove trees up in Olinda because there were a lot of dead trees and it was public and private property, so I think we're done with that project, but that kind of goes into that same question of are there assessments of those other areas like that or maybe some areas still existing in the Olinda area where we need to explore whose responsibility that is? Whether it is the County's, private property owners, MECO's? Because I think, you know, there's a lot of loose material around there especially the eucalyptus trees. And then the other question I had was are you, in the upgrades, is there a plan to replace any of the poles, the above ground poles with, you know, the wood ones, with concrete or steel? We're starting to see more of those around all over the place, utility poles to resist the wind and the hurricane and stuff so is there, has there been any discussion about that?

CHAIR SINENCI: Mr. Reynolds?

MR. REYNOLDS: So, for the steel pole issues, we are basically, when we come in, and we are looking at replacement, we actually do an assessment and see what's needed for that particular situation. In the cases of where Hurricane Lane came through and it burnt a large number of poles in the West Maui Mountains, we actually went through and replaced certain critical poles with much stronger steel poles with smaller transmission style poles in between. Steel poles can take the stress, the weight of these large lines especially when it turns corners or makes bends. So, it's just basically on a case-by-case basis. Steel poles are expensive and, you know, they are not maintenance free. We have been experimenting with other type poles, especially fiberglass poles where you may have seen them around over Olowalu area. You know basically, we're putting those out. We were told that they're UV resistant but time will tell whether they actually start, maintain their integrity or they start fraying and decaying because of the UV.

COUNCILMEMBER KING: Okay. Well, it's good that we're trying to work on a plan for that. 'Cause I was just noticing in the paper, I don't know when it was, I just saw it online, about the greenhouses that they're building that Larry Ellison I think is building on Lanai and they're building them now to withstand 105-mile-an-hour winds so I think we kind of got to start looking at, looking ahead at what potential, possibly climate-related issues we're going to be having.

MS. MARTIN: I think one, if I could add, one of the issues we deal with, with replacing our wood poles with those larger steel poles is depending on the neighborhood of course not everyone welcomes those, so it's been sometimes a challenge to address the concerns within that immediate neighborhood. I recall someone prominent in the community coming before us and actually photoshopping out our poles to show, you know, that they don't want any of these steel poles. And the irony is, you know, we go into the Nahiku area, we met with their community association and they were asking for steel poles. It was a most unusual question. They didn't seem to need it. They didn't have the history of downed poles and all that, but they knew the resiliency of it even though there was just a handful of customers. The other issue with poles and securing the safety side of that is that we often get asked well if we don't want the steel poles can you go underground, you know, to avoid that. And the unique challenge is for us here is not just the cost and who pays for it but the iwi, the fact that we deal with a very unique issue here that placing lines underground is not an absolute go to. The cost gets absorbed, it's a larger cost. In South Maui, of course there's blue rock so it's even harder so the cost can be a very large consideration, but in the Central Maui plains and in other more sensitive areas going underground with amount of iwi, the exposure is a challenge for us as well.

COUNCILMEMBER KING: Okay. Well, yeah, I know it's a challenge too because not everybody understands or appreciates the same types of things. You know I'm just looking at trying to get another parking lot in South Maui and then, you know, trees have to come down and now people are fighting the trees coming down. So, I know

there is always like, you know, another side to everything, but maybe . . . I was going to ask you about, you know, public education and public awareness and the opportunities for public input because it seems like we get these projects and we're dealing with one in South Maui now, you know, above Maui Meadows where the folks don't want to be that close to the batteries or the transformers. And it seems like by the time it gets to the public it's kind of a done deal. So, I think that is where a lot of the heartache comes from. We're seeing it on Oahu at Kahuku Windmills. You know these projects that should be good projects, they're part of the renewable energy, but the way they are being done and it strikes me that it's the same issue we have with affordable housing that not all affordable housing is necessarily appropriate where it's going in, or the way it's going in. So getting, you know, getting that education when the sites are being, you know, being considered might be, you know, helpful to the public so they don't feel like by the time you get there it's already a done deal and, you know, you're just going through the motions. So, maybe you could just comment on that and where we're at with the South Maui solar farm.

MS. MARTIN: So, with that particular one, Paeahu, which is the developer's interjects, it's as Shar mentioned, still going through its regulatory process. The three-member commission and its staff came to Maui and held a public hearing to kind of vet out of some of those issues. You talk about the public acceptance and the complexity of affordable housing utility, electricity, all of those things, and we recognize that so much so that our RFP process requires all bidders to convey to us through their bid, their proposal, what their plans are for community engagement. We know and we recognize that we can purchase power from them if it makes sense and it gets approved from the commission, but at the end of the day, the community cannot accept it or it becomes more difficult to get that acceptability. It makes for a project that gets stalled, delayed, more costly and creates just far more degree of difficulty than maybe even a developer anticipated. So, we built in this requirement now, so they bid in, they have to tell us what their plans are, what their communications are going to be for the community. As you said, it's hard to provide enough information and education for people to wrap their head around to grasp and make informed decisions or positions. Sometimes developers are not quite ready, and we get asked often why are the developers not often from Hawaii? And that's part of the education, needing to make sure that as an industry there are opportunities to build that and to help businesses build, you know, locally. At the level of projects we're looking at, the utility scale projects to replace all those, you know, megawatt hours that Maui and all of our islands like to use for their lifestyles and businesses, requires big utility projects so there aren't . . .the depth of that experience is not quite at the level for Hawaii to meet up with what the needs are today for development. So, we require that. Not all of them are familiar with Hawaii. The question is how much of a role do we as a company play in shepherding a project through. Can we guide them, make them tell us what their plans are, and judge them on how much knowledge and experience and information they're using to build their plan.

COUNCILMEMBER KING: I would like to suggest that maybe you consider going out to the public for, you know, two or three informational meetings when you're putting an RFP

out because by the time you accept one, then it's basically you're asking the developer to go and make sure everybody understands how wonderful this is, instead of like finding out if this is something that's really appropriate for a certain area. And I'm not saying whether one is or one isn't but it doesn't feel to the public that they have any input by the time, you know, you're asking a developer once you approve it then to go out and do this public education instead of maybe as a utility going out and finding out from the public what the concerns are and then writing an RFP so that those concerns, you know, can be addressed in the actual request for proposals.

MS. MARTIN: Sure, actually we require it before they get approval. We want to know how they've, what effort they've made to vet it out within the community that will be impacted. Some do a great job, some don't, as all proposers turn out to be.

COUNCILMEMBER KING: Yeah, I think it's hard because when you're doing a proposal and responding to that, and, you know, I know from personal experience because we've been part of a lot of those proposals, they don't want it, you don't want to make it real public what you're doing because you're competitive right? So, I think it almost falls on the utility to make sure that the RFP has some of the public concerns built into it, you know, when you put that out. And because I don't know how you can require people to go out and make sure the public accepts something before they write the proposal. You know, we're in kind of a Catch-22.

MS. MARTIN: Yes, we are. It is definitely worth considering. We recognize the value of it. Actually, we attempted to work that in to see how that would fit on Molokai, as a matter of fact, but on Molokai that effort has taken us through I think we're on year four almost. We've literally been there for years. And the interesting story behind that is we went to the community and asked Molokai, look we think there's opportunity to make you 100 percent renewable sooner than later but we also know we can't drive it alone so let's talk about the different, you know, aspects of it that's acceptable or would be concerns. We went through that whole process, took input, that input that was developed over years became an attachment for the Molokai RFP and that particular experience also brought us to the community with an RFP workshop to talk about . . . we were talking for over a year saying, you too could find a developer that you would want to work with and come to the table and looking for encouraging partnerships. That process took many years to get through and we're still actually in it. To employ that as a next step on a larger scale to, you know, see where else it could work would be a tremendous effort. We see the value in it though, definitely, and we recognize our communities are changing so that engagement needs to be way more in front.

COUNCILMEMBER KING: All right, I think the community groups would help you. The community associations would help you with those efforts as well, but I appreciate what you do. I was at some of the workshops on Molokai last term and I think my colleague, even though she wasn't on the Council at the time, was at some of those as well. So, you know, I thought it was a really good discussion and certainly to have

that discussion before the RFP is issued makes everybody feel like there's some choice and some input opportunity, so.

MS. MAHINA: Yeah, and we combined it with education knowing that not everyone understands what are the renewable resources so it's hard to drop in. We've over the years tried to get in front of some community associations but they don't find us that exciting, I don't know why, but they don't find our topic that exciting, so it's been, you know, we've been creative at getting ourselves on an agenda, just so we can start, you know, prompting the discussion, but always looking for opportunities. I think you folks see us everywhere because we try anything and everything to make our story interesting and relative and helps us in the end.

CHAIR SINENCI: Mahalo.

MS. SUZUKI: Thank you for your suggestion.

COUNCILMEMBER KING: Yeah. Thank you, Chair.

CHAIR SINENCI: Mahalo, Member King. It's a great point because I don't think PV companies will be coming out to East Maui to, for some large projects but they will be going to either the South Maui or the West where there is, you know, sun exposure. Chair would like to recognize Member Rawlins-Fernandez. Welcome.

COUNCILMEMBER RAWLINS-FERNANDEZ: Aloha auinala, Chair. Mahalo for having me in EACP today.

CHAIR SINENCI: Ae, aloha auinala. He ninau oe?

COUNCILMEMBER RAWLINS-FERNANDEZ: Ae, actually a few. Not just one. Mahalo for scheduling this item. It's really important. And I find it very exciting, Ms. Martin. It's a very exciting topic and we're going to continue talking about it and trying to, you know, make stuff happen. So, I wasn't able to watch the very beginning part, I went through the PowerPoint copy here. Did anyone touch upon an update on the CBRE, the Community-Based Renewable Energy program? Someone did?

CHAIR SINENCI: Mr. McNeff?

MR. McNEFF: We mentioned it in concept.

COUNCILMEMBER RAWLINS-FERNANDEZ: Oh, okay. So, there's one that's been granted to Molokai. I think three on Maui. I'm not sure if there were any on Lanai, and as far as I understand, none have gotten off the ground. I was wondering if you had any updates on that.

MR. McNEFF: I don't have any updates. As far as I know that is still the status.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. So, even the ones on Maui haven't really gained any traction?

MR. McNEFF: Not as far as I know. We can look into that and follow up though.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay, great. Yeah, I'd appreciate that. Okay. And then do you have an update on the pilot program where batteries are installed on people's houses? I don't remember what that program was called but my mom's house . . .

MS. SUZUKI: Is that the one on Molokai?

COUNCILMEMBER RAWLINS-FERNANDEZ: Yeah, yeah. Oh, is it only for Molokai?

MS. SUZUKI: The E-Gear program. Was that the one?

COUNCILMEMBER RAWLINS-FERNANDEZ: I think so, yeah.

MS. SUZUKI: I think we, it was limited to ten systems, nine were installed. I don't know, I mean I know one customer chose not to install the PV system. It was a way for us to move rooftop PV systems forward on Molokai because of the kind of over saturation of energy in the middle of the day, right, and the demand for electricity there. I have not heard of any complaints from anyone, so I believe that it's worked fine but did you need anything more specific?

COUNCILMEMBER RAWLINS-FERNANDEZ: Yeah, because it was a pilot program with only ten houses I wasn't sure if the plan was to expand the program or if that was like an eventual goal in determining, you know, with the ten houses, you know, if you can explain some of the criteria you would deem as the program being successful.

MS. SUZUKI: Okay. I think we are still probably in the data collection stage, but this would be a good time to follow-up and see then what next, based on what we've seen, you know, from the success or not. I think from a satisfaction perspective that's what I was commenting on, but from a data gathering and when would we expand it or not, we'll have to get back to you.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay, yeah, no, I haven't heard anything bad about it. I think everyone's . . . the homes that I know of that have it are satisfied so it would be great to expand on Molokai, I guess. Okay, and then I heard some discussion about the utility poles, steel poles I guess are some of the other material that you use for transmission lines. Have you looked into cement poles? A friend went to Puerto Rico and the poles there withstood Hurricane Maria and the hurricane that came before that and so, you know, after her experience going there and seeing I guess, you know, how much better their poles are than our poles here, if you have any comment on that?

MR. REYNOLDS: So, we have been looking at alternative poles besides wood. One of the I guess road blocks for us for cement is they don't manufacture cement poles so shipping them here would be extremely expensive. We have been experimenting with the fiberglass poles which uniquely kind of telescope with so they can all fit inside a small container. You can ship quite a bit. You know, we do follow NESC ratings for wind loading so as we replace poles we make sure that they are up to the latest standards. But as far as that, you know, really our choices for Maui County are limited to fiberglass, wood or steel.

COUNCILMEMBER RAWLINS-FERNANDEZ: Mahalo. Okay, and then I know it is kind of ironic that we're talking about energy and electricity and the electric is down on Molokai right now. I don't know if you've tried connecting with the Molokai Office, the electric is down. Okay, and then my last question will be regarding the poles. So, the maintenance, do you like keep logs on the maintenance of the different poles in the areas? I think my office tried to reach out for documentation on the maintenance of the poles.

MR. REYNOLDS: Right, so actually we have a company come in, Osmose, that does an assessment on each of the poles, both transmission and distribution side. They actually will actually drill into the pole to see if there is rot on the inside and determine the shell thickness and then they'll actually tag that. They'll say whether this pole it should be replaced soon, or should this pole be replaced immediately. And then that kind of gets into our work order system so we can schedule and get that work done. So, right now, and they also come out and they'll do the fumigation or they'll insert cartridges inside the pole for . . . to be more termite resistant as well.

MR. McNEFF: In addition to that I think we inspect our transmission lines quarterly.

COUNCILMEMBER RAWLINS-FERNANDEZ: The transmission lines countywide? Okay. So, when a pole is leaning about 45 degrees at what point do the poles get replaced?

MR. REYNOLDS: That should have been replaced. There is no way a pole should be leaning that badly.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. So, if there are poles that are leaning like that should I take photos and send them?

MR. REYNOLDS: Yes, please. You can have --

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay.

MR. REYNOLDS: --anyone call directly to our 871-7777 and they will log that call, log it as a work to be done, and should be sending people, or at least telling the crews to go out there and make the repairs.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. So, when the pole is leaning, does the pole just get adjusted or is it also tested to see if it needs to be replaced?

MR. REYNOLDS: Usually what they'll do is they'll do kind of a quick assessment. They'll sound it by hitting it with a hammer and seeing if they get that hollow sound. And they'll do kind of a quick look at the soil, maybe the soil was loose. It could be some attachments that were onto the pole that were, maybe that pole was pulled out of alignment. Was that pole actually hit and damaged in some way? Is it cracked or something? So, there's a lot of things they'll look at. You know, if they can, they usually will try to straighten it out if the soil is very, very loose or lomi or wet or mud, but for the most part, if it's leaning that bad, there is something physically wrong with the pole and they'll just replace it.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. So, the transmission lines are checked quarterly. How often are the poles checked?

MR. REYNOLDS: So, distribution, we have a policy of hitting them once every five years. We have about 23,000 poles. That's why we're having an outside contractor, instead of just the few inspectors we have.

COUNCILMEMBER RAWLINS-FERNANDEZ: Okay. Mahalo. Mahalo, Chair.

CHAIR SINENCI: . . .*(inaudible)*. . . Rawlins-Fernandez. Member Paltin, you had a question?

COUNCILMEMBER PALTIN: Yeah, thanks, sorry. Just to follow up on the other one. I was wondering, how much does the fuel abatement program cost a year?

MR. REYNOLDS: It's really not a separate budget item. It's either rolled into our roads and trails budget where we maintain access or it's part of our vegetation management budget.

COUNCILMEMBER PALTIN: And it's on for 2020, the fuel abatement?

MR. REYNOLDS: They are actually looking at the videos we used for, we captured in the drones to see if areas need to be cleaned up or not. They won't cut live trees. I mean basically we're looking for dead vegetation that are at the base of our poles.

COUNCILMEMBER PALTIN: Not along the line from pole to pole?

MR. REYNOLDS: No, we're just basically trying to clear fuel away from base of the poles. So, usually grass fires will move rather quickly so they may char slightly the base of a pole if it's just a grass fire moving through, but it's that wood at the base of the pole from dead trees and brush that actually keep the fire there, make it hotter, and start burning our poles.

COUNCILMEMBER PALTIN: So, you don't get any kind of government funding or subsidy for the fuel abatement?

MR. REYNOLDS: Only when we work in partnership with an agency like DLNR.

COUNCILMEMBER PALTIN: And do you guys do it other than West Maui Mountains?

MR. REYNOLDS: Right now, we've just been doing the West Maui Mountains because we're working as a partner with the West Maui Wildfire Task Force.

COUNCILMEMBER PALTIN: And what was the reason that 2019 didn't have the fuel abatement?

MR. REYNOLDS: Basically, we just kind of put our funding towards doing the firebreak and road maintenance with DLNR.

COUNCILMEMBER PALTIN: Okay, thank you.

CHAIR SINENCI: Thank you, Member Paltin. I had a couple questions. So, at the energy conference in 2019, some of the Montessori Upcountry students, their concerns was losing power during wind storms. So, their question was if there is any just added movements towards, you know, addressing some of the seasonal windstorms that they get up in Kula, whether it be implementing some additional generators when the power goes down, stuff like that. Anybody respond to our Montessori students?

MR. REYNOLDS: So, putting additional generators Upcountry to service that area currently is not in any plans. It may fall in line with any of this micro-grid policies that get developed in the future, but right now we're still relying on maintaining our existing systems, maintaining alternative routes of power to get up there. An example would be when the Pukalani fire burnt up our transmission line going from Kahului up to the bottom of the golf course at Pukalani, we were able to continue serving that area because we were able to route power through Kula up through the back sides above Wailea, so customers really didn't suffer any outages from that. Of course, windstorms can bring down havoc over a large area so and I think that's where we may have to start looking more in smaller groups if people are interested in doing these types of projects. You know, I think one thing too is disasters are just, they seem to be happening more and more frequently, you know, and Hawaiian Electric has put together a pamphlet for emergency preparedness which is kind of a good starting place to look at how you as a business or a homeowner can prepare for these types of disasters.

MR. McNEFF: But some of the projects that Chris had talked about earlier like the insulated lines, those will help protect, you know, keep the power on should branches fall into the lines where we have those insulated lines going so we're doing pilot projects like that to see how much they can improve reliability.

CHAIR SINENCI: Mahalo, Mr. McNeff. Another question was so as we move towards 100 percent renewable energy, one testifier brought up the issue at our Climate Action Committee yesterday, about just the amount of solar rooftop panels that will be present on the island and so is there any--and I know this is being RFP'd to the solar companies--but is there any way to mitigate whether it be the recycling of those panels and not seeing them go into our landfills? Mr. McNeff?

MR. McNEFF: I think that's a known issue that people are starting to discuss now. I don't know if we've come up with any answers with regards to exactly how to deal with all the panels at the end of their life, but it certainly is something that people are talking about.

CHAIR SINENCI: Right. I guess, just some of the impacts as we move towards 100 percent renewable energy. These are I guess some of the things that we need to talk about as we change our lifestyle to more, you know, sustainable living options.

MR. McNEFF: And no doubt, you know, as part of the transition, I mean, you know, solutions for those issues will start to develop as we get more and more involved into this.

CHAIR SINENCI: Mahalo. Member King?

COUNCILMEMBER KING: Thank you, Chair. I just thought of another question because, you know, we have this 100 percent renewable requirement and it's just for the utility but as we, you know, because there's a lot of effort out there to decentralize and do distributed generation and some of it will be probably privately owned, is there a size that falls in that category that's going to require renewable . . . I mean, if you have your own generator they're not going to come after and make sure you're running it on renewables, so if you're running it on gasoline or diesel, you're probably not going to be part of that mix. But if you are developing a community-distributed generator with, people are proposing it all over the island, like, you know, solar with backup generation or something like that, is there, what is the requirement for privately owned utility? I know there's a point when you get so large you become a public utility and you have to operate like that, so is there a description of who has to adhere to this 100 percent renewable or is it just Hawaiian Electric? Is it just the public utility, what we consider public utility?

MR. REYNOLDS: Yeah. So, actually, it's more than just Hawaiian Electric. The 100 percent goal is the renewable portfolio standard and that applies to retail sales of energy. So, as a homeowner, they could be running a propane, gasoline, diesel generator servicing themselves and not be affected by that RPS goal. Whereas a provider of energy, Hawaiian Electric, our, what we sell to the public needs to come from renewable energy resources.

COUNCILMEMBER KING: Okay. So, if somebody else creates a private company and sells energy to the public they would be subject to that same requirement?

MR. REYNOLDS: Yeah, as far as I can recall it's regarding the retail of energy.

COUNCILMEMBER KING: Oh okay, that's good to know. I had a kind of off the topic question, I was just told that the PUC is meeting on Maui this evening? Do you know what that meeting is about?

MS. MARTIN: Young Brothers' proposed rate increase.

COUNCILMEMBER KING: Okay, so it's just that one topic?

MS. MARTIN: Their agenda indicated just shipping fees and so . . .

COUNCILMEMBER KING: Okay, all right, thank you.

CHAIR SINENCI: Members, any more questions for our esteemed panelists? Okay, seeing none, I would like to thank our panelists. Did you have, Ms. Suzuki, you have any other comments?

MS. SUZUKI: Two.

CHAIR SINENCI: Go ahead.

MS. SUZUKI: Thank you folks for inviting us here today, allowing us to provide you the updates and we really appreciate your support. You know, we've always said we can't do this 100 percent renewable energy alone. So I mean people who have invested in their rooftop systems or in projects on island, you know, the permitting approvals that Administration needs to go through, I mean we're all in it together so appreciate the collaboration and look forward to more of it going forward. Thank you.

CHAIR SINENCI: Mahalo.

COUNCILMEMBER SUGIMURA: One last thing.

CHAIR SINENCI: Yes, Member Sugimura?

COUNCILMEMBER SUGIMURA: So, I see Kuhea in the audience. I just wanted to thank her. I see her all around doing presentations for MECO and you might have mentioned it earlier, so I apologize if this is a repeat but appreciate her.

MS. SUZUKI: Thank you. Yes, we don't do it alone. Thank you, Kuhea.

CHAIR SINENCI: Mahalo, Kuhea. And I'm just quickly reminded about a comment that was made yesterday in our Climate Action Committee that, you know, a lot of the things we do on our little island community sometimes it doesn't have a large effect on a global scale. But I think, you know, with . . . we can be a great model for the rest of

the world with 10 million visitors coming to our island community. So, I think as stewards of the aina, the environment, this, the strategic planning for renewable energy is, it will have worldwide effect, so mahalo for all of your work in this industry. Mahalo. So, with that, Members, this was a 7(B) item that was posted for no legislative action to be taken. If there are no objections, the Chair will defer this item.

COUNCILMEMBERS VOICED NO OBJECTIONS.

ACTION: DEFER PENDING FURTHER DISCUSSION.

CHAIR SINENCI: Okay. This concludes today's Environmental, Agricultural and Cultural Preservation Committee meeting. Thank you very much, Members and MECO, well no MECO, HECO representatives. This January 7 meeting of the EACP Committee is now adjourned. . . . *(gavel)* . . .

ADJOURN: 2:59 p.m.

APPROVED:

SHANE M. SINENCI, Chair
Environmental, Agricultural, and Cultural
Preservation Committee

eacp:min:200107:mg

Transcribed by: Mary Lou Green

CERTIFICATE

I, Mary Lou Green, 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 the 28th day of January, 2020, in Kula, Hawaii

Mary Lou Green