

EFFICIENCY SOLUTIONS AND CIRCULAR SYSTEMS COMMITTEE

Council of the County of Maui

MINUTES

October 5, 2023

Online Only via BlueJeans

CONVENE: 9:07 a.m.

PRESENT: VOTING MEMBERS:

Councilmember Keani N.W. Rawlins-Fernandez, Chair
Councilmember Tamara Paltin, Vice-Chair
Councilmember Tom Cook, Member
Councilmember Tasha Kama, Member (In 9:19 a.m.)
Councilmember Alice L. Lee, Member
Councilmember Shane M. Sinenci, Member
Councilmember Yuki Lei K. Sugimura, Member (In 10:18 a.m.)

STAFF:

Ellen McKinley, Legislative Analyst
Paige Greco, Legislative Analyst
Samantha Tanck, Legislative Analyst
Megan Moniz, Legislative Attorney
Maria Leon, Committee Secretary
Jean Pokipala, Council Services Assistant Clerk
Lei Dinneen, Council Services Assistant Clerk
Shelly Espeleta, Supervising Legislative Analyst
Richelle Kawasaki, Deputy Director

Zhantell Lindo, Council Aide, Molokai Residency Area Office
Roxanne Morita, Council Aide, Lānaʻi Residency Area Office
Mavis Oliveira, Council Aide, East Maui Residency Area Office
Jade Rojas-Letisi, Council Aide, Makawao-Haʻikū-Pāʻia Residency Area Office

Haunani Madela, Executive Assistant to Councilmember Rawlins-Fernandez
Sarah Sexton, Executive Assistant to Councilmember Rawlins-Fernandez
Jared Agtunong, Executive Assistant to Councilmember Cook
Evan Dust, Executive Assistant to Councilmember Kama
Lei Kama-Sickels, Executive Assistant to Councilmember Kama
Dawn Lono, Executive Assistant to Councilmember Sinenci
Gina Young, Executive Assistant to Councilmember Sinenci
Axel Beers, Executive Assistant to Councilmember Johnson
Kate Griffiths, Executive Assistant to Councilmember Johnson

ADMIN.: Caleb Rowe, Deputy Corporation Counsel, Department of the Corporation
Counsel

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OTHERS: Leilani Chow, Energy Sovereignty Programs Lead, Sust'āinable Molokai
Lori Buchanan, President, Ho'āhu Energy Cooperative
Jennifer Potter, Director, Strategen
Jennifer Yoshimura, CEM, LEED AP, Advisor, Electricity Infrastructure, Pacific
Northwest National Laboratory
Ali Andrews, CEO, Shake Energy Collaborative
John Sarter, dcbel
Ian Chan Hodges, Principal, Responsible Markets
Shay Chan Hodges, Co-Organizer, MAUI ESF Investment Project

Testifiers

Mario Vendetti
Robert Bence
Thomas Croly
Jasee Law

(20) additional attendees

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

CHAIR RAWLINS-FERNANDEZ: . . .*(gavel)*. . . Aloha kakahiaka kākou. 'Ehiku minuke i ka hala o ka hola 'eiwa ma 'elima o 'Okakopa i ka makahiki 'elua kaukani iwakāluakūmākolu. E 'olu'olu mai, e ho'omalū ke Kōmike Efficiency Solutions and Circular Systems. 'O wau 'o Keani Rawlins-Fernandez, ka luna ho'omalū o kēia Kōmike. Aia au ma 'ane'i i Maui nui a Kama. And let's see if we have any testifiers at the Molokai District Office. And I see we currently have no testifiers at the Molokai District Office. It was 9:07 on October 9, 2023. Will the Efficiency Solutions and Circular Systems Committee please come to order. I'm your Chair, Keani Rawlins-Fernandez. I'm at the Chambers in Maui. Okay. And I kēia lā, me ko kākou eia hope luna ho'omalū 'o Tamara Paltin. Aloha.

VICE-CHAIR PALTIN: Aloha kakahiaka kākou. Broadcasting...or sorry...streaming live and direct from Nāpili. I have one unnamed minor and one dog here with me. Thank you.

CHAIR RAWLINS-FERNANDEZ: Mahalo. Next, we have Committee Member Shane Sinenci. Aloha.

COUNCILMEMBER SINENCI: Aloha kakahiaka iā 'oukou pākahi a pau. Hau'oli wau ma 'ane'i i kēia lā. No testifiers at the Hāna Office.

CHAIR RAWLINS-FERNANDEZ: Mahalo. Next, we have Committee Member Tom Cook. Aloha.

COUNCILMEMBER COOK: Aloha and good morning, Chair.

CHAIR RAWLINS-FERNANDEZ: Aloha. And it looks like there are no testifiers at the South Maui District Office as well, or at least for now. Maybe you will have some later. Next,

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we have Committee Member Alice Lee. Aloha.

COUNCILMEMBER LEE: Aloha, Chair.

ITEM 1(4): ENERGY SOLUTIONS (Rule 7(B))

CHAIR RAWLINS-FERNANDEZ: Okay. And I think that's everyone. Am I missing anyone? Member Sugimura is not on yet, yeah? Okay. And Committee Member Yuki Lei Sugimura is...will be joining us later. Did we get a note? No? Okay. And Committee Member Tasha Kama let me know that she would be joining us in a little bit as well. Okay. And then our two Non-Voting Committee Members, Member Gabe Johnson and Member Nohelani U'u-Hodgins, are always welcome to join us, although Member U'u-Hodgins let me know that she'll be watching the recording at a later time. We will have resource persons later, and I'll introduce them at that time. We have our Committee Staff today, Committee Secretary Maria Leon, Legislative Analyst Ellen McKinley, Legislative Analyst Jared Pascual...no? Legislative Attorney Megan Moniz, and Committee Secretary Maria Leon. Yeah. And Assistant Clerk Jean Pokipala. We have one item on today's agenda, Members. And we will be taking testimony after our presentations. I don't know. We apologize for the noises in the Chambers. Okay. There's construction going on if you hear that. . . .*(laughing)*. . . Okay. Members, we will proceed with our first and only agenda item today. Under Rule B...sorry. Under Rule 7(B) of the Rules of the Council, the Committee will receive presentations relating to energy solutions. The Committee will receive presentations relating to the Molokai Energy Resilience Action Plan and related matters. Okay. We will receive presentations from Leilani Chow, who is the Energy Sovereignty Programs Lead at Sust'ainable Molokai; Lori Buchanan with Ho'āhu Energy Co-op...Cooperative; Jennifer Yoshimura, Advisor at the Pacific Northwest National Laboratory; and Jennifer Potter, Director of Regulatory Innovations at Strategen Consulting. Okay. For the past decade, Molokai advocates have been working on fighting the injustices imposed upon our community in the energy field. The prices we pay, the amount of diesel imported, the environmental impacts and safety risks to our Molokai community that our Molokai community has endured inspired community members, passionate about creating an energy future that our future generations would not have to suffer under. Investment toward this goal has involved working closely with the community to determine what kind of energy projects would be supported and where. And, you know, we...we owe it to the loved ones lost in the fire, and the homes, and all the memories contained within them to do better. So, while the Lāhainā community may not have the bandwidth right now to...to do this work, and to even think about this as they're in survival mode, I thought it would be good to have these presentations so that the community can see what work, and what kind of possibilities are out there, and see what kind of resources are willing to support the community's future endeavors. So, we will begin with our first presenters, Leilani Chow and Lori Buchanan. Oh, I'm sorry, Members. 18(A) of the Rules of the Council, I would like to designate our...the four presenters as resource to this Committee. Are there any objections?

COUNCILMEMBERS: No objections.

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CHAIR RAWLINS-FERNANDEZ: Mahalo, Members. Oh, aloha, Ms. Chow. Aloha, Ms. Buchanan. Mahalo nui for joining us this morning.

MS. CHOW: Aloha, Keani, and others, mahalo for having us. I'm going to share screen. Okay. Okay. So, mahalo nui for the intro, Keani. And Auntie Lori and I are here to briefly share our Molokai experience in pursuing a community-led energy planning process for our island, designing and implementing a planning process that is accessible to our community, and the results of centering planning processes around communities so that they can determine their own future. Okay. So, I'm going to introduce this project to you the same way that we introduced it to the community. And we'd like to share a short video that we made at the very beginning of CERAP that provides a brief overview of the community's perspective on why this planning...why this project and this process is so important to you. Okay. If someone in the chat can just let me know if you guys can hear them good.

[\[Molokai CERAP Community-Driven Renewable Energy Plan video played\]](#)

LEILANI, CERAP: We have a very exciting planning process that's coming up, it's called the Molokai Community Energy Resilience Action Plan, or Molokai CERAP for short. The main goal for the Molokai CERAP is to 100 percent renewable energy generation as an island in a way that's feasible, and that it is also respectful of our culture and our lifestyle here on Molokai.

BARBARA, COMMUNITY ADVOCATE: You know, I mean, the world already knows oil is just not the solution, and it's...it's harmful to our climate, to our environment. And so, different ways where we can draw upon more natural energy just makes good sense.

PONO, COLLEGE STUDENT: So when you think of ancestral knowledge, knowledge that came from the kūpuna, like the mo'olelo of Māui and how he snared the sun. He did that because he...he wanted his mom's kapa to dry. Think of that mo'olelo and apply it to today. How can we utilize the sun's energy to help benefit us? How can we utilize the makani, how can we utilize the honua, how can we utilize Kanaloa, the ocean?

LEILANI, CERAP: The CERAP planning process is about twelve months long, and the first six to seven months are really going to be focused on educating our community. You know, why can't everybody have rooftop solar? Why does our electric bill cost so much? You know, where do the energy...energy decisions get made and who makes those decisions?

TEHANI, SUSTAINABLE MOLOKAI: Now's the time for us to maybe ask questions, like what is renewable energy, what are our options? And then coming together and talking story, and seeing, you know, what works best for us.

EDWIN, EDUCATOR: The reason why I'm so interested in renewable technology is, you know, I've...I've...I'm...I work with STEM, I work with students, and the science already shows that definitely, we have to start moving towards that. Especially for some place with limited resources, such as Molokai, we should already be moving on it now.

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MARK, BUSINESS OWNER: I believe it benefits the...the island and the...and our businesses. You know, it cuts down on expenses and stuff so you can pass it on to the community.

LEILANI, CERAP: There's a lot of options out there for us as far as technology and as far as energy storage. We've got wind, solar, wave energy, pumped hydro, waste energy. There's a lot of solutions, and a lot of really great examples of how those have worked in other places that are similar to Molokai.

TEHANI, SUSTAINABLE MOLOKAI: This plan cannot be successful without each and every one of you.

BARBARA, COMMUNITY ADVOCATE: We have to do our part to follow through and make sure we can keep Molokai, Molokai. And the only way we can do that is to get involved.

[Sustainable Molokai logo; video ended]

MS. CHOW: Kala mai. Okay. So, CERAP was the community's solution for addressing some of the chronic problems of top-down energy planning, including the breakdown of trust in energy institutions, cultural conflicts and environmental degradation, and the inequity of past renewable-energy programs that were driven by outside interest. And so, I'm just going to share a little bit of the procedural process of how we got to actually doing our own energy planning as a community. Okay. So, for decades, Molokai has been asking for renewable energy planning...for renewable energy. And for decades, the conventional energy planning process and development process have failed to produce acceptable projects for our island. Kala mai. Everything is coming in one at the time. You know, we were one of the first islands that were projected to be 100 percent renewable energy by 2020. That did not happen. And so, in 2020, the Molokai Clean Energy Hui formed to address some of our energy planning challenges. At the same time, Ho'āhu Energy Cooperative Molokai also formed to take on some of the implementation challenges that our community faces, as well as the...the workforce goals that our community wants to reach. In June of 2021, the Molokai Clean Energy Hui, and Ho'āhu Energy, and Sustainable Molokai requested a status conference with the PUC, where we presented the community's idea for how we would like to do renewable energy planning on our island, and asked for them to pause their HECO and PUC planning processes to allow the community to do our own planning. They said yes in an unprecedented decision. And so, Molokai had two years from January...well, we had from January to June of 2023 to complete our community-led energy planning, called Molokai CERAP. And we've completed it in July of 2023, submitted our final report to the PUC, and held a status conference, again, to close the loop, and share the findings from CERAP, and ask for continued PUC and HECO support. And so, we just had that status conference last month, on September 18th. And right now, we're waiting to hear back from the PUC on their guidance for moving forward with Molokai CERAP and this kind of planning for Hawai'i. The vision for Molokai CERAP was to develop a portfolio of clean energy projects to achieve 100 percent renewable energy for Molokai that was not only feasible, but also respectful Molokai's culture and environment and strongly support by the community through doing an island-wide planning process that

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was community-initiated, -driven, and -led. But it turned out to be so much more than just a portfolio of projects for us. Molokai has...the Molokai CERAP has achieved unprecedented community engagement. Due to the process being centered around community accessibility, we were able to engage and have so much of our community participate and lead, guide, drive this planning process, the projects that we looked into and did our homework on, and that were ultimately codesigned by the community. We also identified three overarching and interconnected renewable energy goals that specifically focused on emergency preparedness, disaster resilience, and fair, renewable access for all. We did develop a road map or a portfolio of ten renewable energy projects, as well as energy system requirements is what we're calling them, but basically, it's our values translated into what those values look like in energy pro---energy planning and energy projects. And then we also created and designed a community-led energy planning process, and documented it very well in our CERAP report and appendix. And so, in there, you can find all of the additional context from Molokai's energy history, all of the technical resources that we used and that were created for this process, the outreach materials...all of it is in there so that communities have access and can adapt it and replicate it for themselves. And so, we're hoping that this will be a great tool for communities like Lāhainā, who are ready to do community-led planning, wanting to do community-led planning, and now they've got a tool that they can build on in this new approach. So, here is another look at that braided process flow chart that we saw in the video. That one was--in the video we made at the very beginning of CERAP, this what it ended up looking like at the very end. And I don't want you to focus on trying to read all of the little blocks, but I just wanted to show you that hey, this is what a community-led process looks like. It does put a heavy investment into getting the community prepared for these conversations. We spent six months doing our homework, learning about 19-plus different topics that the community was interested in. And we asked the community specifically, A, how do you guys want to participate in this process, and when, and what do you want to know? And so, from those answers from the community, we designed this process and timeline that puts all of the community engagement short and sweet at the end with iterative design. And so, we took draft 1 out to the community...physically out to the community in each district. And then we...we incorporated all of the results to make draft 2. Did the same thing, took it back to the community for their feedback, which resulted in draft 3 and draft 4. And we just plan to continue doing that process until we had a product that they community strongly supported. And so, for us, it took four iterative rounds of community codesign that ultimately led to our final portfolio and CERAP report. Okay. So, this is the visual representation of our project portfolio. Molokai designed ten renewable energy projects that will take us to 100 percent clean energy by 2045 or sooner. Each project in this portfolio was carefully designed to provide Molokai with energy systems that increase Molokai's overall emergency preparedness by strategically decentralizing our energy generation. As you can see, these projects cover the entire island. And right now, all of our energy is generated right here in the middle of the island, but we would like to increase our disaster resilience by...by decentralizing and moving projects out. All of these projects ensure safe and reliable energy resilience for our community, they focus on supporting regenerative resource management for Molokai's resources, and they provide equitable and economically feasible renewable energy access for all. So, these projects range from, you know, like CBRE-style

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community-shared solar to individual...individual systems for homes on and off the grid. Yeah. Okay. So, at the end of CERAP in July, we had categorized these projects in two main categories; projects that were ready for action and project codesign, and projects that needed additional deep-dive studies and planning. So, the first project that was our community's top priority was on-site renewable energy and storage systems for all of our critical infrastructure. This will immediately improve the safety, and security, and disaster resilience for all Moloka'i residents. Our second project was asking the PUC to fast track our very own, community-owned CBRE project at Pālā'au and Kualapu'u, which will demonstrate that the people of Molokai can design, own, manage affordable renewable energy projects. Project number 3 was a community-scale solar project for Maunaloa and West Molokai. This will begin to decentralize the Molokai grid, which will increase reliability and resilience for the people of West Molokai. Project number 4 was a renewable energy project...a range of renewable energy projects that support homesteading. This demonstrates self-governing Hawaiian communities can implement numerous renewable energy strategies to improve the quality of life through energy independence. Project number 5 was focused on individual renewable energy projects, both on and off the grid. And so, this supports the independence and resourcefulness of Molokai families, businesses, and organizations. In the deep-dive category, we have a...a deep-dive study for the east end of Molokai. If you look at our...our energy infrastructure on East Molokai, it's all along the main road, which is right at sea-level rise. And so, we want to make sure that our planning is continuing to be integrated with, you know, where...what we're planning to do to address sea-level rise, and our transportation, and all of that. Project number 7 was floating solar at the Kualapu'u reservoir. This project has the potential to provide substantial amounts of renewable energy to the most populated parts of Molokai, in Central Molokai, which covers a majority of our critical infrastructure. This solution was really interesting to the community because it doesn't include developing on valuable agricultural land. We're utilizing the surface of a gigantic reservoir that we have smack dab in the middle of our island. And this reservoir has about 95 acres of surface area. The project that we designed here was about 8 megawatts. That would cover all of Central Molokai, which is about 33 percent of our energy, and that would take up about half of the surface area in that reservoir. But we need...or we want more study to understand the environmental impacts, economics, and some of our implementation considerations that our community needs to...needs to consider. Project number 8 is pumped hydroelectric energy storage, also using existing water resources and infrastructure. This would help us reduce the...the future use of chemical batteries needed to store our renewable energy. It's a very large, complex project, and what from what we've learned from our neighbors on Kaua'i and other places that use pumped hydro, this project requires a lot of investigation, a lot of stakeholders to be involved, and potentially ten-plus years to implement. Project number 9 was figuring out what our firm energy options will be for the last 10 to 20 percent. We know that when you have renewable energy, you still need to have a portion that is firm...or, you know, you can turn it on and get it as soon as you need it kind of thing. It doesn't rely on there being sun or wind. And so, we have a little bit of time before we get to the last 10 to 20 percent, so that's why it's a little bit further down. We have started early discussions in our community, but, you know, technologies are evolving so quickly, and we're...we're keeping our eye open on our options until we get to the part where we need to decide.

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And then our last project is EV use on Molokai. So, we...we know that there are important EV issues that...that need attention, such as vehicle maintenance and repair, charging infrastructure, and all that kind, and potential impacts on Molokai's overall fuel costs. And so, it's an important part of us moving to 100 percent renewable energy, and all the way at the bottom of our list because we've prioritized our community safety emergency preparedness and all that kind. Okay. So, that list where we had chunked them out and ready to...ready for action and ready for deep dive, that was in July, just a couple months ago. Since then, we've gotten local, State, and Federal partnerships to move every single one of our portfolio projects forward. And that was not at all what we were expecting. We were thinking, you know, we would pick a couple...like, our...our top priority projects, and...and really work to move those forward. For projects for our critical infrastructure--floating solar, pumped hydro--which we thought would be, you know, a little further down in the timeline, we've...we got to be a part of the ETIPP program, which is Energy Transition Initiative Partnership Projects with the Department of Energy and the National Labs. And they are providing all of the technical assistance to help us assess the economic and...considerations and our feasibility for these projects on Molokai, which is super, super exciting for us. And so, we're going to get 12 to 18 months of, like, expert technical assistance. We also got the support of the Clean Energy to Communities program, which is also with the Department of Energy and the National Labs, and they will be helping us to assess our grid overall. And this project actually includes all of...all the projects in our portfolio because we want to make sure that they move together, and are being planned integrated. But it will help us to check out our grid and continue the planning for West Molokai, for our homesteads, for the individual household projects, grid capacity, and for what we were going to do for the east side of our island. And then the Hawai'i State Energy Office has...already has initiatives on firm energy and clean transportation, and they're prioritizing Molokai so that all of our projects can move forward together, which is amazing. And then we also have our co-op, who is doing an amazing job at moving projects forward for our island. And I'll let Aunty Lori share a little bit more about those.

MS. BUCHANAN: Aloha, honorable County Council Members. The hardest working, smartest Council in all of Hawai'i nei, and you know, I love you guys the most. Been talking to this Council for years. And you must be thinking, what is Aunty Lori doing now, as the president of Ho'āhu? Well, I think it's all holistic. I wanted to thank Leilani and Sust'āinable Moloka'i for all the hard work that they are doing. And you saw all that projects she just said, the main take away from that, it's...it's community-driven. Not companies, through RFPs from offshore companies in...in the mainland or abroad, they're community-driven. And so, I give all my heart and love to Sust'āinable Moloka'i and all of the partners they have in funding that we get to do all this work. But really briefly, because we wasn't happy with failed projects and people who do it, trying to come to Molokai to do commercial solar, we formed...the community formed Ho'āhu Energy Cooperative in order to apply for the community-based renewable energy projects. And we did that, respond to the RFP, in 2022. The larger project is a 2.2-megawatt solar project at Pālā'au with a 10-megawatt battery storage, and the smaller project is a 250-kilowatt solar project on carports over the parking lot at our Kualapu'u Rec Center. And so, we submitted the contracts to the PUC in late September, so recently, and we're waiting for approval from the PUC, which we expect to have by the

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end of this year. And so, we understand that it's, you know, faster than normal for a contract approval, but we really appreciate the support from the community that has really asked...through this process who prioritized the community and the co-op in coming up with the renewable energy projects for Molokai. And thank you so much. And Leilani, are we going to straight to workforce development? And so, you know, we can build projects...the...the co-op can build projects, the community can, but of course, we need people to maintain them. So, just as important was workforce development, and Ho'āhu realized that...the urgent need of Molokai families living off the grid, without connection to the electric grid. And most of those families were depending on generators and paying high costs for propane and diesel to run their essential appliances. You know, stuff like going to the store every day to buy ice for coolers, that's really what tugged at our heart, was trying to help those families as well. So, Ho'āhu codesigned the program for installing solar and batteries for each family at affordable prices, and got support from the Pacific Northwest...Northwest National Labs to design these small kilowatt systems. And you going hear from them, you know, after me. So, earlier this year, Ho'āhu was selected by the Sandia National Labs for funding, and additional assistance to hire contractors to deploy 15 of these small systems and battery systems. So, 50 families already applied through Ho'āhu's online portal, and later this year, 15 families will be selected to receive subsidized, renewable systems. We hope to expand this program in the future, and this project and our projects all align with Sust'ainable Molokai's CERAP projects, as we've seen. And Ho'āhu's stands ready to support the deployment of future projects on Molokai. And again, thank you, County Council, for giving us time to give our mana'o. And who is next, Leilani?

MS. CHOW: Sorry, I was muted. I think it goes back to me, and this is just the...the ending part of our presentation. I just wanted to give you guys a little, like, sneak peek into kind of, like, the back end of what went into...to planning...doing our Molokai Community Energy Resilience Action Plan. And so, in our report, we've identified four key ingredients for pono planning process in Hawai'i. The first key ingredient was dedicated and trustworthy grassroots leadership that is founded on respect and upheld by systems of accountability. CERAP's core strength can be traced back to founding the Clean Energy Hui and Ho'āhu, and our founding members began to build this community leadership team, and we invited trusting...trusted and well-respected individuals to represent the different perspectives and expertise that we have across the island as Sust'ainable Molokai raised private funds from multiple sources to dedicate paid, professional staff to support mobilizing the Hui's volunteer leadership, and the growing Hui established a foundation of important community leadership values and made sure to keep each other accountable and uphold those values at all times. The second key...key ingredient was a space for working with all of the off-island and non-Molokai technical partners and resource advisors to ensure that all who were involved were firmly committed to the community's goals, and remain rooted in community values. So, the Hui created this much-needed space for an ongoing, two-way dialogue that was necessary to rebuild mutual understanding, good working relationships between the community and off-island energy decision makers and experts. Together, the Molokai Clean Energy Hui members and off-island resource advisors began to build a new paradigm of community-led energy planning, one that discussed and intentionally redistributed the traditional planning roles, to ensure that

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projects, processes, programs, et cetera, were always in alignment with community goals and values. And...and by doing that, you know, the...the outcomes that were produced were something that the community could confidently say yes, they support. The third ingredient is a planning team with equal parts community expertise and technical expertise. So, strong technical expertise is needed to design solutions that are grounded in the physical realities of an electrical power grid, energy economics, and policy, et cetera. But it takes equally strong community expertise to provide critical place-based insights that validate whether or not those proposed solutions are actually viable on island. And for this process, Molokai selected HNEI, which is the Hawai'i Natural Energy Institute out of UH Mānoa to be our closest partner, advisor, and technical partner throughout the CERAP process. And the last key ingredient for Molokai...or for pono planning is a place-based process for comprehensive community codesign. So, the close collaboration process between the Molokai Clean Energy Hui, Sust'āinable Molokai, HNEI, Ho'āhu, et cetera, and all the participating Molokai community members led to the development of the CERAP portfolio, and we've been calling it the Comprehensive Community Codesign process, or codesign process. This approach combined and applied all three of the previous key ingredients into a holistic methodology that was tailor-made for Moloka'i, and the results speak for themselves, right? The expertise developed by the community during CERAP produced this portfolio of projects that the community is actually interested in, and have an unparalleled degree of community support. So, achieving all of these different ingredients for CERAP was really, really a huge ask to ask of the Molokai community, and Sust'āinable Molokai, Ho'āhu, the entire community really showed up for this process because of it. This is an unrealistic ask of other communities, especially communities like Lāhainā who are dealing with so much right now, and so they need all of the support they can get from...from you folks, from Maui County, from the PUC, from HECO, from all of our energy experts that are across Hawai'i to support them in the learning process, in the codesign process...to be there as a resource advisor, to make sure that our policies give communities this option to do their own planning from the get-go instead of making them, like, jump through the hoops to go get it themselves, to make sure that there is ongoing financial and technical support so that they can design projects that they really need and that would really support them. And so, when we went to the PUC status conference, we asked all of those questions of the PUC, of HECO, of the Consumer Advocate, and I think that those questions also apply to you folks at the County Council. How can we help make sure that communities are supported through...for their community-led energy planning? And that's the end of our presentation. Mahalo nui, you guys, for all of your time. And I'll pass it to --

CHAIR RAWLINS-FERNANDEZ: Mahalo, Ms. Chow.

MS. CHOW: Yeah. Take it away, Keani.

CHAIR RAWLINS-FERNANDEZ: . . .*(laughing)*. . . Mahalo for your presentation. Next, we will receive a presentation from Jennifer Yoshimura, followed by Jennifer Potter. Jennifer weaves together 21 years of experience and leadership in the energy and engineering industry. As a Kānaka Maoli, Jennifer focuses her approach, methods, and partnerships through her cultural heritage, embracing her kuleana to address systemic

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and systematic barriers that perpetuate inequities for communities. She amplifies indigenous knowledge, which creates tension with Western and colonial frameworks. As an advisor to PNNL, Jennifer partners with communities, government agencies, industries, and organizations to find codevelopment solutions in community and energy work. Aloha, Ms. Yoshimura. Mahalo again for presenting before us.

MS. YOSHIMURA: Awesome. Mahalo. And I just wanted to confirm the screen sharing, you folks can see the presenting mode for...for those online?

CHAIR RAWLINS-FERNANDEZ: We can. It's in presenter mode instead of the presenter view.

MS. YOSHIMURA: Okay.

CHAIR RAWLINS-FERNANDEZ: Would it be possible to have it full screen?

MS. YOSHIMURA: Yeah, let me see if I can get that...

CHAIR RAWLINS-FERNANDEZ: And I think --

MS. YOSHIMURA: And we'll try again.

CHAIR RAWLINS-FERNANDEZ: Staff does have a presentation as a backup.

MS. YOSHIMURA: Yeah, I'm not sure if it's --

CHAIR RAWLINS-FERNANDEZ: There we go. It looks better.

MS. YOSHIMURA: Does that look better? Okay. Let's see.

CHAIR RAWLINS-FERNANDEZ: Well, it...after you put it in full screen.

MS. YOSHIMURA: Okay. Does that work?

CHAIR RAWLINS-FERNANDEZ: There you go. Perfect.

MS. YOSHIMURA: Okay.

CHAIR RAWLINS-FERNANDEZ: Yes.

MS. YOSHIMURA: Okay. Great. Thank you again, and...and mahalo for having me. My name is Jennifer Yoshimura, and I'm...I'm an Advisor at Pacific Northwest National Laboratory, and very privileged to be here today. I do want to acknowledge, you know, the community, the impacts, and the grief, and loss, and healing, and making sure that I'm respectful and giving space for that. Been born and raised in...in Hawai'i, and actually graduating from Baldwin High School, Maui has a special place in my heart. So, really, my intention today is to share a community program called Energy Storage for Social Equity. That's sponsored by the Department of Energy with the Office of

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Electricity. And this program has partnered with Lori Buchanan, with Ho‘āhu Energy Cooperative Molokai, and really just sharing an example of what codeveloped partnership looks like from the Labs and government agencies. And so, with that, we'll highlight--you know, we have a lot of scientists and engineers doing modeling work capabilities, and so when the community is ready, you know, knowing that there are resources available to support the vision and...and work that you folks are...are wanting. So, with that, Energy Storage for Social Equity is mainly looking at how technology, like energy storage, which is flexible with a wide range of applications, can support community goals, not only their needs...whether it's energy accessibility, affordability, the environmental impact, the social impact, and decarbonization. And then oftentimes, we hear resiliency in terms of infrastructure, but we wanted to ensure that community resiliency is coupled with that. And so, from, you know, the...the goals of this program, we comprised the...the program into two phases. We call Phase 1 technical assistance, it's where communities leverage the expertise, engineers, the economists, our modelers, our social scientists, to help scope work and provide the expertise and knowledge in codeveloped solutions. Aunty Lori mentioned working with Sandia as well, so Sandia is our colleagues in the program they're leading, the project development and deployment phase, which just started in April and May of this year. We wanted to, you know, from a...a technical-assistance perspective in partnership with communities, not just focus on technology and the solutions that are...are perceived as...as solutions, but connecting equity and workforce. And Leilani mentioned this, and Lori as well, around the desire for local economic development, local workforce needs, and so complementing a lot of that work with techno-economic analysis. The program created space; we have 14 communities in the program. And we wanted to take a step back and allowing communities to knowledge share with each other, develop their own relationships, and network with one another. Recognizing that when communities and participants in TA after the program wraps up, they are left to look at different pathways for funding to get projects deployed and/or seek further assistance. So, within Energy Storage for Social Equity, we did quite a bit of research understanding the landscape of funding from Federal funding, State funding, philanthropy...private funding, and created and cultivated 14 unique memos for each of the communities, and...and Ho‘āhu Energy Cooperative had one tailored specifically for Molokai. As I mentioned, you know, oftentimes as engineers and within the energy industry, we hyper-focus around just the technology. And so, you know, just reemphasizing centering on communities, allowing communities to control their scopes of work, the solutions that they want. Understanding the benefit flow to the community and the intended recipients, we...thinking about how to incorporate capacity building, workforce development, and skills, and again, I mentioned the knowledge sharing and networking within communities. We then look at the different technical solutions, whether it's interconnected microgrids...we have communities without any access to energy and/or energy infrastructure, and therefore, needed to look at islanded systems. Other aspects that we provided communities with is resilience hubs in terms of events--community centers, faith-based sites, as well as schools. And then last but not least, solar plus battery energy storage for commercial and residential buildings. So, that's the high-level program, and the intention behind the...the program and what we designed. And then more specifically and how we partnered with Ho‘āhu Energy Cooperative Molokai. A lot of text on the slide, but just wanted to highlight the regular cadence of meetings that

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cultivate relationships and trust, to learn and codevelop scopes that work together, understand community goals, not just the needs...not just the immediate interest, but long-term interest, and I...I think Leilani and Auntie Lori shared a lot of that in their previous presentation. So, ultimately, PNNL scoped a project with different tasks, one of them, which you'll see on the next slide, was nano grid or islanded systems that looked at using recycled solar panels or PV panels, understanding what the life-cycle costs are for those systems, as well as utilizing recycled EV, electric vehicle batteries, as well as new batteries. We provided a workforce and equity analysis in conjunction with Liliana Napoleon, who needs a lot of that workforce for Ho'āhu. I mentioned the funding opportunity work that we've done, and then community-scale systems and work as well. And last but not least, one of the requests that came in from Ho'āhu Energy Cooperative Molokai was supporting weekend meetings and community meetings. And so, partnering with Ali Andrews with Shake Energy, and really, we were able to share information around microgrids and answer questions from the community during those Saturday meetings. The...on the...on the right-hand side of the screen, you'll see, you know, what the community identified as...as challenges from an energy perspective--affordability, resiliency, reliability, and energy access. There are, I would say, additional notes. And so, this is where I think, you know, from a lab and...and working...funded by the Government and working with a community, we need to be agile, we need to be flexible. Three-quarters of the way with...through technical assistance, there were challenges coming up that was outside the control of Ho'āhu Energy Cooperative Molokai, and the community, and PNNL. And that had to do with land ownership with Molokai Ranch. And so, what we...what we did was pivot that scope of work. We revised that in conjunction with the community and presented an analysis for Sandia for selection for the project development and deployment phase for cost share. And that's what Auntie Lori mentioned about being selected in the first round. They are currently leading the prioritization and selection of households. The...the Labs, we do not select that. We leave that up to the community to decide what that priority looks like, and how they're going to work with the community, so definitely not Lab-led. The next slide--and I...I do just want to acknowledge and...and thank you to Ho'āhu Energy Cooperative Molokai for allowing us to share this information. So, this is an example of the nano grid or islanded systems that we looked at for the Nā'iwa Hawaiian Homestead site. There is no utility infrastructure that serves this...these 58 lots, and so, the intention with the nano grids was to address electric...energy access as well as telecommunication access. There was a request to look at modular systems, as families grow or...or decrease, having modularity to support that immediate need, and so our engineers provided different solutions based off of the requests coming in from Ho'āhu. The next slide...the next few slides show the community-interconnected project at Nani Maunaloa. You will see on this screen that there are a number of houses or rooftops shaded that impact the amount of generation...renewable energy available for specific households. And so, what our team did was look...was looked at a novel approach of shared microgrids. Instead of rooftop solar and energy serving just one house, we looked at combining homes, three to four homes, and recommended that if the community...if Ho'āhu moves forward, there needs to be an understanding with household engagement and agreements that would support the overall community goals. So, again, just different ways of thinking about how to support the overarching community goals and getting engagement at the household level and individual level.

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Workforce development was a priority for Ho‘āhu Energy Cooperative Molokai, and again, huge shout-out and recognition for Liliana Napoleon for the work that she has done. She and Ho‘āhu looked at removing a lot of the barriers from educational requirements and age to participate. They partnered with the Mākaha Learning Center, and was able to get OSHA training for the cohorts, and then also had partnerships with Arizona State University for microgrid classes and training. PNNL supported this work in reviewing entry requirements and understanding what the opportunities are, as well as barriers for...for workforce opportunities on island, all while trying to support Ho‘āhu's goal to hire all local Molokai residents from installation, as well as maintenance of microgrid systems, project management, accounting, and other positions and resources that they had identified. The next few slides are highlighting the equity and workforce, and more the equity work that our team has done, identifying some of the key goals of the program, accessibility, affordability, and resilience, and working with the community to understand the impact and trying to map that, ultimately providing resources that Ho‘āhu Energy Cooperative Molokai could take for either funding pathways and/or amplification for support at Federal, State, and local levels. So, most of the identifiers that you will see on this slide just summarizes social, economic, and demographic indicators, and then looking also at the energy infrastructure and environmental indicators as well. So, I know it's a lot of text on this slide. The next few images are really geospatial maps that the team has pulled to highlight aspects of the indicators to provide the community insights, and help them also find pathways to link for funding, as well as their short-, mid-term, and then long-term strategic goals. So, this is an example of geospatial map from Justice40, highlighting the census tract level data. The next slide is an example of the EJ, environmental justice screening and mapping tool of the medically underserved. And then food deserts is the last image from our equity team. And again, there's quite a bit of information within our final deliverables with Ho‘āhu, but a lot of that has been listening, and learning, and codeveloping work with them. The last few slides, I do want to pivot a little bit, just to provide the community and leaders an understanding of resources that PNNL and other National Labs have when you are ready and have questions as well. So, from a grid planning approach, we are looking at emphasizing decarbonization resilience and equity, where oftentimes metrics are mainly looking at reliability and cost, and so amplifying what that looks like with a focus on community, not just top-down solutions, but bottom-up. And so, a lot of the work that...and information that Leilani and Auntie Lori have shared, I think there's a lot of opportunities for Maui to consider as you folks think about moving forward. And so, with that, I really appreciate the time today to speak and share a little bit more about energy storage and social equity and some aspects of grid planning to consider as the community moves forward. And mahalo, yeah, County Council, and Leilani Chow, and Auntie Lori as well, and Ali Andrews. So, thank you.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Ms. Yoshimura. And before I invite Ms. Potter to begin her presentation, I failed to acknowledge Committee Member Tasha Kama, who joined us at 9:20 this morning. Aloha.

COUNCILMEMBER KAMA: Aloha, Chair. And thank you for these wonderful resources that you have put in the front of us, that it gives us food for thought that what can happen

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on Molokai can also happen all over our State. So, thank you so much.

CHAIR RAWLINS-FERNANDEZ: Eō. And Member Sugimura was on at 9:15, and then I just saw her jump off about 15 minutes ago, so if she joins us again, I will acknowledge her at that time. Okay. Next, we have with us Jennifer Potter. Jennifer is a Director of Regulatory Innovations at Strategen Consulting, where she conducts research and leads projects relating to resilience planning, distributed energy resources, advanced rates, demand-site management, and regulatory proceedings. Prior to joining Strategen, Jennifer served as a Commissioner with the Hawai'i Public Utilities Commission. Jennifer was previously a faculty member at the Hawai'i Natural Energy Institute, where her research focused on modeling marginal and avoided costs, DER integration, VPP pilots, and demand-response implementation framework, et cetera. And then you can let us know what those acronyms stand for. Prior to her time with HNEI, Jennifer was a Senior Scientific Engineer Associate at Lawrence Berkeley National Laboratory, where she was project lead on the California Demand-Response Potential study. Preceding her stint in academia, Jennifer worked for Sacramento Municipal Utility District in a number of roles, including Project Manager for the most comprehensive TOU/CPP study completed in the nation. Jennifer began her career at Roseville Electric as a Principal Forecaster and Project Manager. Jennifer has a Master of Science in public policy and management from Carnegie Mellon University and a Bachelor of Arts in economics and international studies from Southern Oregon University. Aloha, Ms. Potter. Mahalo for presenting for the Committee today.

MS. POTTER: Aloha. Thank you, Chair, and thank you, Committee Members. It's a pleasure to be here with you today. And thank you for putting my PowerPoint presentation up, I appreciate the help today. That's great. So, I want to start by...and talking a little bit about where this idea is coming from. So, I am a resident of West Maui. I live in...I live in Nāpili, and I've been here for about ten years. And so, my community has been impacted just drastically, and to see the devastation and the absolute trauma that's been caused has...has...has been, you know...shaken. It's shaken us to the core. Obviously, I still have trouble talking about it. But so...so, we've been, you know, thinking about how...how to best assist the community moving forward, and what is it that I can bring to the table as a community member, and working with other community leaders in...in trying to envision a Lāhainā that's better, to make improvements moving forward, different from what we've seen over the last 100 years, and how we've structured our electric grid. So, given that my expertise is in energy, this is where I figured that I could lend a hand. And I was contacted by Shay and Ian Chan Hodges, who are community members here in Maui, and they are very invested in the recovery efforts of Lāhainā, and helping contribute to solutions moving forward. So, they reached out to me, and we've put together...started putting together an idea, a concept, which we have now called Maui #PowerBack Project. And this project is...is an effort to really work with our community members to try and envision and create a Lāhainā that is suitable for...for our community, and reflects the values and...and the vision of...of our community members, and so that we can actually move...move forward constructively and in a way that's resilient and reliable in the future. So, next slide. So, today, I'm just going to give an overview of the Maui #PowerBack Project, and then we'll talk a little bit about the objectives and the outcomes that we hope for. We've

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bifurcated this research project and...and this project into two phases. The first phase will focus on research and planning, and the second phase will focus on a deep dive into research in grid planning, and then also community leadership. And so, next slide. So, we were really focused on what can we do to provide a better energy future for West Maui. And there's a need, this is a necessity. We need--we've had National, and State, and local leaders, as well as community leaders that have indicated that it is imperative that they are involved in rebuilding Lāhainā and the West Maui. So, thinking about how we could basically...how we could assist in achieving...our community and achieving a...a reliable future that's community based, we set out the goal to provide impartial expertise and...and conduct research that's aimed at supporting a community-driven energy decision making, similar to what was happening--in fact, exactly like what happened in Molokai, because Molokai just really set the example of what community planning can be. And...and this is...this is something that we want to bring to Lāhainā, and hopefully replicate in a way that provides the assistance to community members to...to really develop a comprehensive plan for what their energy future would look like. Next slide. Excellent. So, really, this is a collaboration between West Maui and Maui residents, and we were focused on, you know, how to interact with the utility, the...the...the regulators, including the PUC, the consumer advocate, and...and advocating for our consumers on the West Side of Maui. And in looking at clean energy innovation, things that we can future proof our grid moving forward that can help provide resilience, independence, and...and reliability to the West Side of Maui. So, this...this project will focus on looking at generation options, distribution, and then how power...how we actually consume energy on the West Side. And obviously, we want to follow as close as we can to the CERAP project, because it just did such an exemplary job of really laying out a...a future for the residents of Molokai. So, one thing I want to point out is that the electric grid on Maui is...is pretty interesting because we...so, the West Side is actually almost its own microgrid. We actually get all of our power from a centralized location in Mā'alaea, so the Mā'alaea Power Plant is...we transmit all of the energy over to the West Side from the Mā'alaea Power Plant. So, thinking about how to restructure and build Lāhainā differently, better, in a way that's more comprehensive, we probably have to look at the whole of the West Side. And so, thinking about how we can actually change the structure of the electric grid in a way that's...that's more meaningful for...for our environment, and...and resiliency in facing climate change, and then also providing the affordability to our residents on the West Side and in particular, in Lāhainā. So, with that, moving to the next slide. All right. So, I want to...before I begin on the objectives, I do want to state that this is...you know, we are in the beginning phases of planning for this initiative. We...we have not really...because this is a draft, obviously, of...of our...of our concept that I'm presenting to you today. We're still looking at funding in...in an effort to...to get funding. We're not seeking funding from the Council today, we're...we're actually looking at philanthropic opportunities to...to help advance this initiative. But this is really a compre--we're...we're still working on creating a comprehensive vision, but we need the community to do that. So, this is what we're laying out as possibilities at this point, but we do need to engage with the community to really get that vision, and the...and define those objectives, and really be able to make a...a...a plan for how we're actually going to conduct this initiative. So...so, basically...but for the most part, the high-level initiative that we're focused on for the next few months is...is, you know...is...the objectives include, you know, providing

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community resources and planning and tools to the community to help lead an energy planning initiative for Lāhainā and the West Side. And this is...includes creating an engagement platform, so similar to what we saw Molokai just present on, the number of engagements that...that the Hui and the...had with...with the community. You know, 2,800 meetings is pretty...pretty significant. So, you know, thinking about how we can create that platform where people can come in on the weekends or they can come in after work and provide input and really collaborate on what this energy future should be. That...creating that platform is really, really imperative. And so, we also need to create energy futures. So, visualizing what could...the possibilities could be, and I'll dig into this in just a moment, but really thinking about what those future energy scenarios could look like with various resource mixes and infrastructure options. And we need this to come from the community, so we need the community to provide input and direction on what those resources and infrastructure should look like. And then finally, we need to develop opportunities for the community to engage with State and local officials on the community energy plan, similar to what we are doing here today, so that's exactly kind of the objective. So, excellent. So...so, here are some...a list of some of the outcomes, and I want to speak to these just a little bit. And this is very similar, I...I feel like the Molokai presentation just set me up very well, so thank you so much, Leilani, for...for setting the stage, because really, we do want to replicate and...what...what is done on Molokai and make it...make it Maui's initiative, but still, you know, do similar planning and that community-based planning that's so imperative, I think, to making our future just...just really solid. So, first, I...you know, I think that we all agree that energy independence is...is really critical. Speaking...you know, as I mentioned, that West Maui is...is kind of its own microgrid, that we transport power all the way from Mā'alaia. It is ability to...to create an independence where we actually have generation that's local, and close to the load centers, and it's not based on fossil fuel. So, we would use renewables, or hydrogen, or some type of other fuel that could provide energy that's not fossil fuel that we're relying on outside entities in other countries in order to provide our energy to...for us. So, that energy independence also coming from community-based renewables, and that are owned by the community, and that are part of our...on our roofs and on our...and so, that...that structure and that infrastructure is actually part of...of the cohesive community, and is...and...and helps us achieve our independence from...from fossil fuels and also, potentially from the utility. So...and then, of course, we want to look at renewable energy adoption and how can we increase the penetration of...of renewable energy in our communities so that we can actually foster that energy independence. And also, what's really critical is...is thinking about the affordability, and this is something that I...I want to speak to just for a moment. When we...when we talk about what our options are for creating a new grid and an energy infrastructure, one of the things that we've heard often is undergrounding the lines on the transmission and the distribution lines. So, this is a very expensive opportunity to...to do that, and so, rather than just saying, this is our one and only solution is to underground the lines in order to create, you know, sort of the next Lāhainā that's going to be resilient moving forward, we need to look at other options and opportunities, and that would include, you know, local renewables that help drive down the cost of energy and reduce that energy burden. So, renewable energy has...can put downward pressure on rates. If you create energy independence, that's even more energy affordability because you've created, you know, sustainable energy resources

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that are able to provide energy at, you know, all hours of the day that are not relying on the grid. So, this affordability is a really important component, I think, for the next generation of our energy infrastructure here in Lāhainā, and so, looking forward to finding opportunities that we can actually move away from just saying, you know, this is...this is the one and only way of doing it, and looking at other options and opportunities to really lower the...the cost of...of...of the new grid for Lāhainā. Because if we actually do go in--and Ian and Shay Hodges will speak to this in just a moment--but if we do think about only undergrounding our lines, that cost will be passed on to all of the ratepayers on Maui, and it will be very, very expensive. Our rates will go up exponentially, and this is something that we have to consider when we think about how we are going to interact with the utility moving forward, because those...that cost will be passed straight through to the residents of Maui. And so, that's a very important consideration when we think about how we're going to actually rebuild and...and...and restructure. And one other thing I want to mention on this page is the Economic and Workforce Development. The more of the energy independence that we have in West Maui, the more workforce opportunities that we have because people will be able to service and provide, you know, the renewable energy assets, and they'll be able to provide installation, and still just be a...a...a job market that's created around renewable energy and about the energy ecosystem on West Maui that will provide jobs to...or hopefully our local...local residents here in West Maui. So, that's...that's a really critical component too, is when we think about our energy futures, how we can actually make it more affordable, how we can create jobs, how we can be more independent. So, these are really the outcomes that we'd like to see coming out of this project. So, next slide. Excellent. So, we...as I mentioned, we bifurcated the study and this initiative into two phases at this point. It will probably more likely be like three or four phases and...once we've turned this out. But the first phase is...we assume to be about six months. And this will be our research and planning. So, we'll be looking at sort of setting up the...the...what are the questions that we need to answer during our...our...our next phase, and when we work with the community, and what's the high-level assessment of the different...of the load, and the infrastructure, and the generation options that we have, and then how can we come up with some examples of what it would look like in an energy future for Lāhainā. We also want to identify that job creation, that job opportunities, and then also identify funding opportunities for funding the work, and...and this, I'm going to speak to for just a moment. We have a lot of opportunities to work with the Federal Government right now on grant opportunities. So, there is the Inflation Reduction Act, which is looking at a Solar For All program, and this is looking at implementing affordable tax on rooftops throughout communities across the United States. And there is a...there is billions of dollars that have been earmarked for this initiative, and it's an opportunity for our community to think about dialing in to those types of grant opportunities so that we can implement and take advantage of some of this...this funding from the Federal Government. Additionally, I applied for...with the Hawai'i State Energy Office earlier this year, applied for a grant for about 10,000 batteries that would be installed in low- to moderate-income homes, and these would be...would be pooled together to provide what's called a virtual power plant, and essentially creating more energy independence for residents that were participating and could be part of that virtual power plant. So, this is an opportunity for us to use that grant funding to help rebuild Lāhainā by putting batteries on those homes in addition

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to potentially using solar panels. So, we have some funding opportunities that we can dial into, and we need to get on top of that so that we can make the most of...of those opportunities in...in the time that...that we have, as soon as possible. So...and then also...ultimately, coming out of the six-month phase will be all of these things combined, creating, and planning...and planning, and tools for this initiative, and providing that to the community and saying, what would you like to do next? Here's some information that we've put together, how would you like to proceed, how can we assist you, what's the best way we can move forward here? So, next slide. So, as I mentioned before, and just briefly I'll touch on this, so here's some of the energy resources and infrastructure that we can...we can consider and when we're modeling and thinking about what's the next energy future will look like for Lāhainā. One that I mentioned earlier was the undergrounding of transmission and distribution lines, that's an option that we should consider and keep on the table. Distributed energy resources that I've mentioned, microgrids. We've talked about vehicle-to-grid integration, which is using things like F-150s, the Lightnings, the Ford F-150s, they are huge trucks with giant batteries inside that you can basically roll around on the grid, and plug in, and provide energy and power. They can be a resilience factor, so this is something that we'd like to include in looking at...at some of the resource potential and opportunities that we have. Of course, we definitely want to consider community-based renewable energy, so this could be owned by...actually owned by the community, or it could be owned by a third party, and yet...and still provide the power that we need for...for some of our larger-scale customers in Lāhainā side. And then also hydrogen hubs. So, thinking about some innovation and...and how we can incorporate innovative and new technologies into providing resiliency to the hub...into the...the grid. Next slide. Okay. So, this is Phase 2. So, this is going to be a more detailed look. So, we're looking at...you know, we'd be looking at the grid needs assessment, similar to what Jennifer was talking about, is taking a look at what the grid entails, what...what Maui looks like, in particular in West Maui, and identifying what the needs are. So, how much load do we need to...to service, how much...what are our options for servicing that load. And...and this includes things like the hotels in Kā'anapali. How are we going to help make them more resilient and actually hook them up on a grid that might be now a microgrid. So, we need to think about this more of a holistic planning and...and sort of a West Maui, not just a Lāhainā grid. So, the...and then also, we need to think about local energy resources. And as...as was stated in Leilani's presentation, decentralizing our energy generation is absolutely critical. So, not relying on Mā'alaea to provide all the energy for West Maui, but looking at decentralizing that energy generation, and...and providing the opportunity for residents to have the ability to provide some of that energy to the grid, or to the neighbors, or to themselves. So, next slide, please. Okay. So, this is just similar to what I was just speaking about. You know, we...we need to model the transmission and distribution systems. One of the things that we need to do is estimate the cost for the energy future scenarios so that we understand what we'll be asking for, and then...and, you know, when we're planning our energy future. So, this...this...as I mentioned, you know, thinking about the undergrounding costs, typically that runs about \$5 million per mile to underground lines. So, if you think about the cost to do that for 30 miles, and then also the distribution system, that's quite a bit of money. So, we...let's think about how we can do this differently and in a way that...that can help...you know, that are...that are...a community can buy in and basically make the plan, rather than just

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saying, this quick fix is going to be undergrounding the lines. So...and then next slide. And that's it. And I'll turn it back over to you, Keani...Chair. Thank you.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Ms. Potter. Before we move forward, I'll acknowledge our Committee Member Yuki Lei Sugimura is now present in the Chambers. I saw you on --

COUNCILMEMBER SUGIMURA: . . .*(laughing)*. . . I tried to . . .*(inaudible)*. . .

CHAIR RAWLINS-FERNANDEZ: -- online earlier.

COUNCILMEMBER SUGIMURA: As I was driving to the meeting was...yeah. Thank you.

CHAIR RAWLINS-FERNANDEZ: Such commitment.

COUNCILMEMBER SUGIMURA: Good morning, everybody.

CHAIR RAWLINS-FERNANDEZ: . . .*(laughing)*. . . Mahalo. Okay. Members, it's 10:21. I'm thinking we take a quick break, and then we can continue on with testimony when we reconvene. As a note to those signed on and those wishing to testify, if you would like to testify, please indicate your intention to testify in the chat, and Staff will add you to the list. Those in the chambers wishing to testify, you can go in the lobby and sign up with Staff outside. And we'll take a break to 10:35. Is that okay, Members? Wonderful. Okay. The ESCS Committee is in recess until 10:35. . . .*(gavel)*. . .

RECESS: 10:22 a.m.

RECONVENE: 10:37 a.m.

CHAIR RAWLINS-FERNANDEZ: . . .*(gavel)*. . . Will the ESCS Committee please return to order. It's 10:37 a.m. And I...before we begin with public testimony, for the record, we have Legislative Analyst Sam Tanck--you're the Legislative Analyst?--and Legislative Analyst Page Greco also with us today. Mahalo, ladies. Okay. And we'll go to public testimony. Oral testimony via phone or video conference will be accepted. If you would like to testify, please indicate so in the chat. And as a last safeguard to ensure everyone who is wishing to testify in this hybrid meeting is given that opportunity, I will make a last call for testimony after we have exhausted the list. Testifiers wanting to provide video testimony...video or audio testimony should have joined the online meeting via BlueJeans link or phone number noted on today's agenda. Written testimony can be submitted via eComment link at mauicounty.us/agendas. Oral testimony is limited to three minutes per item. We ask that you state your full name and organization, but if you'd prefer to testify anonymously, Staff will identify and refer to you as "Testifier" and assign you a number. Please be courteous to others by turning off your video and muting your microphone while waiting your turn to testify. Once you are done testifying, or if you would...do not wish to testify, you can view the meeting on *Akakū* Channel 53, Facebook Live, or mauicounty.us/agendas. Thank you so much for your cooperation. The Chair will maintain decorum at all times. As a reminder, the chat should be used

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only to sign in for testimony and not for public commentary on the meeting. It will be considered a breach of decorum for members of the public to use the chat for any other...anything other than testimony sign up. Staff has been monitoring individuals joining today's meeting by phone and by video, and we will do our best to take each person up in an orderly fashion. I will now call the first testifier, John Sarter, followed by Ian Chan Hodges.

. . . BEGIN PUBLIC TESTIMONY . . .

MR. SARTER: Hello.

CHAIR RAWLINS-FERNANDEZ: Aloha.

MR. SARTER: Thank you so much. Aloha, Maui County Council. A little bit about me. I am not Hawaiian, but my...my partner in life, Lorena Garcia, has generations going back here on the island. It's really a pleasure to be able to present to you, and I thank everybody so much. The testimony and the presentations prior to this are so on point, it's so important. What I want to discuss is new technology that's available from a company that I actually work for called dcbel. I'll put it in the chat, again, and my contact information, but essentially, all of the presentations prior to this touched on a vehicle-to-grid technology, and that's what our company has developed. It's a solar inverter combined with a bidirectional EV charger, so that allows homes and businesses to directly charge their EVs from their solar on site or from the grid, and then use the EVs to power homes, and also export energy to the grid. So, there was a pilot in 2012 to 2015 called Maui JUMPSmart that tested this technology, and it happened right here on Maui. And it was very successful, but at that time, the codes, and standards, and communication protocols were not really ready for this technology to evolve into the mainstream, but now they are. So, dcbel has just received the first North American certification, a UL listing for a approved bidirectional EV charger for homes. And what this does is creates immense opportunities for home and community resilience by utilizing EVs as the battery. Instead of a station battery, it's your transportation and a battery that can both power you're home when the grids out and...and export to the grid to support the grid. So, a Nissan Leaf, for instance, is already a bidirectional vehicle, and that can power your home for three days or more. So, you know, in the process of rebuilding for Lāhainā which has been discussed, and by the way, my partner and I lost our home in...in South Lāhainā, a tragedy. So, this is really very personal to me, and I want to ensure that this technology is able to evolve and go forward as we rebuild. But what's important is to be able to prewire homes, even if you don't have the money or choose to install the technology now, to be able to prewire these homes so that it can be done. It's going to cost a couple hundred dollars to do it in advance as opposed to thousands of dollars later to retrofit a home. So, the...the great thing about this technology is it costs approximately the same as a comparable solar inverter alone, so you really get all of this bidirectional capability for free, essentially. And we've been IEEE 2030.5 certified for grid interoperability and communications. So, what this creates is everything that everyone's been talking about, energy independence for homes, for the community. The ability to create microgrids without even using utility wires, really, because you've got a mobile energy asset that can go to places where the

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energy is needed and share it. And the . . . *(timer sounds)*. . . One last thing. We support any electric vehicle, not just a Ford F-150. Any EV auto maker that will work with us, we support them, and we can work with. So, in closing, I'll put my contact information into the chat, and if anybody wants to reach out for collaboration opportunities, please do so. Thank you. Aloha.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Mr. Sarter. I'd love to invite you to be a resource person if Members would like to invite him. Any objections?

COUNCILMEMBERS: No objections.

CHAIR RAWLINS-FERNANDEZ: Do you have the time?

MR. SARTER: Thank you. Yes. Absolutely.

CHAIR RAWLINS-FERNANDEZ: Okay. Great. And then that way, we can get into deeper discussion after we close public testimony. Mahalo. Okay. Our next testifier is Ian Chan Hodges, followed by Mario Vendetti.

MR. CHAN HODGES: Aloha. Good morning, Councilmembers --

CHAIR RAWLINS-FERNANDEZ: Aloha.

MR. CHAN HODGES: -- and Chair. My name is Ian Chan Hodges, and I am with the Responsible Markets and Maui ESG project. And thanks for the opportunity to testify. I watched the presentations earlier from Leilani Chow and Aunty Lori on Molokai, and I wanted to start by actually just giving a little bit of background on myself as far as it comes from renewable energy. In 2015, I was retained by the . . . *(inaudible)*. . . Consumer Advocate to be an expert witness in the process when NextEra was proposing to acquire Hawaiian Electric for 4.3 billion, I believe it was. And then in 2015, I was a coauthor of a study on a clean energy innovation for the Hawai'i State Energy Office. And I say those two things just to also say that that experience of...of participating in all of these hearings with NextEra, and also doing the study and other things that I've worked on, it...watching what Molokai has done and what the people of Molokai have done that you just saw the presentation about is just really impressive. I mean, sitting in those hearings with NextEra back in 2015, 2016, with all of these mainland experts and everything testifying for literally weeks on end, what...what Molokai has done is just so impressive. And I think that moving forward with what Jennifer Potter was talking about, what I see as a real opportunity is to take the...the talents, and resources, and people of Maui County, particularly with West Maui, and be able to try to do...do what Molokai has done. And I think that if you...you know, listen Jennifer Yoshimura, who was a graduate of Baldwin High School; Leilani Chow, I believe a graduate of Molokai High School; there's all these people locally and people that I've talked to who are graduates of Lāhainā High School . . . *(inaudible)*. . . Lāhaināluna, we have the people, actually, to be able to do this. So, that being said, it's really exciting to watch all they've been doing. And to hear from people statewide who are experts in this to say that Molokai has all this expertise and has actually done these things is very impressive.

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The second point I wanted to make very quickly was that--and this is already touched on--is whatever costs are incurred by Hawaiian Electric in rebuilding are going to be put to ratepayers. I think it gets called rate base, you know, right? And one of the concerns, I think, about that that probably hasn't been brought up yet is that because after the wildfires, HEI, Hawaiian Electric's holding company, was downgraded significantly to junk bond status. Their cost have actually capital and borrowing money to do this...to do the rebuild is much...is significantly higher. And I think one of the ways to...to sort of think about it is...it's like the people of Maui County have given Hawaiian Electric their credit...our credit card, and they're running up these bills, and the interest rates on that credit card just went up significantly. So, one of the imperatives, and I'll...I'll sum up here...is for the community to actually be involved in the planning because whatever the outcome is, we are going to be paying for it. Thank you so much.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Mr. Chan Hodges. Okay. Any questions, Members? I...I might have questions later, so if there are no objections, I'd like to designate Mr. Chan Hodges a resource to the Committee as well. Any objections?

COUNCILMEMBERS: No objections.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Members. Okay. Our next...next testifier is Mario Vendetti, followed by Shay Chan Hodges.

MR. VENDETTI: First of all, I'd like to know if anybody did their homework. Does anybody have land or water test results from the EPA before they're going on to try and determine how to rebuild Lāhainā? And why...why is it that there's testimony sites in Lānaʻi, in Molokai, in South Maui, in East Maui, and here, but nowhere in West Maui? And why is it that I'm always finding out about these meetings last minute? You are purposefully trying to keep us silent in Lāhainā. There...the Westin, the Civic Center, there's many places. You did it last week. I want to know where's...where's the 95 million from Biden? Where's the 100 million from Bezos? Nobody in Lāhainā is getting any help. Everybody is homeless, being kicked out of their hotels. Where's this money going? I want transparency. Does anybody have answers? I'm not just asking.

CHAIR RAWLINS-FERNANDEZ: This is public testimony, sir. Please complete your testimony. This is not --

MR. VENDETTI: All right.

CHAIR RAWLINS-FERNANDEZ: -- not a Q and A session. Thank you.

Mr. VENDETTI: Well, I've asked repeatedly for EPA results on water and land. Nobody give a --

CHAIR RAWLINS-FERNANDEZ: Sir, the agenda item is energy solutions, so if you could stick to the agenda.

MR. VENDETTI: The energy solutions are BS because this is all Biden's BBB, Build Back

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Better. Recess? Yeah, that's what I thought. But this...this is all planned by Josh Green and Biden. They put in the BBB in place before the fires. It's extremely obvious that the city was intentionally burnt down, and that's why you cover it in black tarp. Can anybody explain how aluminum rims melt into a liquid river? Because I'll tell you that forest fires only get to 1,400 degrees. . . .*(timer noises)*. . . To melt aluminum, 2,400.

CHAIR RAWLINS-FERNANDEZ: Mahalo for your testimony, sir.

MR. VENDETTI: Can anybody explain that? No.

CHAIR RAWLINS-FERNANDEZ: It was not a forest fire. Okay. Thank you so much for your testimony. I don't see any hands for questions, so thank you.

MR. VENDETTI: It wasn't a forest fire?

CHAIR RAWLINS-FERNANDEZ: No.

MR. VENDETTI: Okay, what was it?

CHAIR RAWLINS-FERNANDEZ: Not a forest fire.

MR. VENDETTI: Exactly.

CHAIR RAWLINS-FERNANDEZ: It wasn't a wildfire either.

MR. VENDETTI: Exactly.

CHAIR RAWLINS-FERNANDEZ: And it wasn't your...the whatever. So, anyway, please submit your ideas. We welcome whatever ideas you do have. If you want to continue to criticize, that's also your right too, but, you know, at this point, we welcome more ideas than criticisms so that we can all work together. Mahalo.

MR. VENDETTI: Wow. When nobody gives answers to anybody.

CHAIR RAWLINS-FERNANDEZ: I'm sorry, sir.

MR. VENDETTI: And we can't get...

CHAIR RAWLINS-FERNANDEZ: You're done.

MR. VENDETTI: And the County...and the County refuses to bring us water.

CHAIR RAWLINS-FERNANDEZ: I'm going a five-minute recess. . . .*(gavel)*. . .

RECESS: 10:51 a.m.

RECONVENE: 10:56 a.m.

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CHAIR RAWLINS-FERNANDEZ: . . . *(gavel)*. . . Will the ESCS Committee please return to order. My apologies for that interruption. We'll continue with public testimony, starting --

VICE-CHAIR PALTIN: I think it's really soft or cannot hear anything.

CHAIR RAWLINS-FERNANDEZ: How about now, is that better? No. How about there, is that better?

VICE-CHAIR PALTIN: Now it's better.

CHAIR RAWLINS-FERNANDEZ: Okay.

VICE-CHAIR PALTIN: Yeah.

CHAIR RAWLINS-FERNANDEZ: Okay. Maybe we want to turn down the volume in the chambers then, so I'm not yelling in everyone's ear here. Okay. How's that? Little bit...little bit down. It's still kind of loud. Maybe it helped. Okay. Member Paltin, can you still hear? Is that better? Okay. Great. Okay. And, you know, just for the record, we did have a testimony site in West Maui. Member Paltin, if you can share the...

VICE-CHAIR PALTIN: Yeah, it's in the burn zone. All our stuff burned. I mean, they haven't...like, it's not in a reentry area yet. I did see the structure looked really burned, my son showed me on YouTube the last minutes of it, when the fire...I guess somebody had it . . . *(inaudible)*. . . in there. But Foodland is still standing and McDonalds, but not our building.

CHAIR RAWLINS-FERNANDEZ: Mahalo for sharing that. And it did take time for Member Paltin to find that location, so, you know, we're...we're working as quickly as we can to be as accommodating as we can. Mahalo, Member Paltin. Okay. Our next testifier is Shay Chan Hodges, followed by the individual calling in with the last four digits 9228. Aloha, Ms. Chan Hodges.

MS. CHAN HODGES: Aloha, everyone. Yes, I'm Shay Chan Hodges. As Jennie mentioned, Ian Chan Hodges, who testified, and I...I have been working with her to develop this #PowerBack project that she presented, and I just wanted to add a few things. First, as Ian said, the other presenters today, and particularly those from Molokai, demonstrate how much incredible expertise in the area of community-based energy planning we already have in Maui County. And of course, as we've seen in the last two months, there's no question that Lāhainā residents are extremely well organized, and in normal times, they could easily, successfully pursue a similar process as the Molokai community has. Of course, these are not normal times. They're not normal times for the West Side, the County as a whole, as Ian talked about as far as, you know, the cost of this, or even the globe and, you know, how often these kinds of things might keep happening. With regard to the #PowerBack project, Ian and I have been focused on funding and finance, particularly from an equity perspective and community-based perspective, and innovation. We've also learned over the years that we seem to have a

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knack for serving as a kind of glue that connects the strengths and knowledge already in our communities with outside support and resources. So, one of the things that we started looking at is what kinds of resources, whether financial, technical assistance, toolkits, might be a fit in supporting the energy planning process, especially when it comes to workforce development--which of course, there is a huge need for--and subsequent deployment and innovation...and innovative energy solutions that the community identifies. Jennifer Yoshimura talked about how her group can help with mapping out resources because the trick, of course, is figuring out what opportunities are a fit for a community's needs, what the community qualifies for, what's available, how best to access those funds. As Jennie mentioned, there are billions of dollars from the Biden Administration for a...this is really a once in a generation investment in infrastructure, clean energy, climate resilience. And thankfully, there's quite a few entities who we've starting...we're starting to identify that help communities access infrastructure and clean energy funding. There are resources for supporting community-based infrastructure planning for post-disaster communities specifically. We've started reaching out to those resources and making connections with folks at groups like Greenlining, Dream.org, Partnership for Equitable and Resilient Communities, Regensis. They all focus on community engagement planning and prioritized infrastructure projects. So, my main point is just let...to let you folks know that in addition to all of the expertise within the County, there are also entities throughout the country who want to support community-driven energy solutions for the West Side, and one of our priorities has been to start building those relationships. Creating a new energy for...sorry...creating a new energy future for Lāhainā and the County as a whole is possible, and from a financial, safety, sustainability, and resilience perspective, we really can't afford not to do everything that we can to make that happen. Thank you so much.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Ms. Chan Hodges, for your testimony. Members, because of her expertise, are there any objections to inviting her as a resource person?

COUNCILMEMBERS: No objections.

CHAIR RAWLINS-FERNANDEZ: Okay. Seeing no objections. Ms. Chan Hodges, are you...do you have the time?

MS. CHAN HODGES: Yeah.

CHAIR RAWLINS-FERNANDEZ: Okay. Great. Mahalo. Okay. Our next testifier is the individual calling in from the phone number ending in 9228. You are unmuted. You may proceed with --

MR. BENICE: Aloha, Chair --

CHAIR RAWLINS-FERNANDEZ: Aloha. Aloha.

MR. BENICE: -- and Council, and community members. My name is Robert Benice, I'm a farmer here in Kula. And I...I guess when I first called in, I got to hear that excellent

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presentation from Moloka'i, and it's a great example of how good the locals can just do it. And I was...I'm a farmer, so I used to have to pay regular electric bills, and I've been making my own solar electricity for a while now. And you get the solar company over here, they've been open since the '70s. They're an employee-owned company, and they're great to work with. And I doing the work, so I talking to Hawai'i Telcom, and they had one old timer on Kaua'i. I was talking to. In Kaua'i, they get also public utility. And the water company, they do...I mean, the Water Development [sic], the County, they do pretty good. So, instead of this for-profit monopoly that is HECO, that is doing a really, really bad job...I mean, they getting sued, and their top shareholders are the same top shareholders that own everything now, like Vanguard, and State Street, BlackRock. So, instead of working with these ESG kine things, 'cause I remember when they talked about that at the farm meeting, and even Larry Fink, and Charles Schwab, and these WF guys, they don't think ESG is good because, like, Tesla, they make the first electric car, they get a lower ESG score than a tobacco company. So, I don't think we need foreign money, we just need the \$95 million that is going to the for-profit HECO. It should be going to the locals so we could get solar. I think I looked into that grant for the low-income solar distributed. It's really hard to find anything on that Hawai'i State Energy website, but I think when I found the program--and a lot of these programs, they require you to be connected to the . . .(timer noises). . . the grid, which is, again, a for-profit monopoly owned by a foreigner, billionaires. So just like Maui Pono trying to steal the water and all owned by the Canadian pension, that could be owned by the Hawaiian pension, so, like, locals could be own them. And the electric company could be owned by the International Brotherhood of Electrical Workers, they the one that's doing all the work already. So, I think instead of looking at dealing with these big trillionaire companies and not having them paying anything to help locals, we should have more of this Molokai-based awesomeness. And I know that the four of you on the Council that got . . .(inaudible). . . by the people don't have the majority, but the majority probably not going to back anything for tax or hold those big companies accountable, but maybe we should have another vote, and get more people that would work for the people. Because if you just charge these big companies what they should be charged just for the property taxes of their assets, you could pay for all of the rebuilding. Also that using the . . .(inaudible). . . is a good idea, yeah?

CHAIR RAWLINS-FERNANDEZ: Mr. Bence, if you could please conclude your testimony.

MR. BENCE: And I got a grant for one of those electric trucks, so...but basically, it's way cheaper if you make your own electricity, and it's incredibly cheaper. You pay for the solar in like four...four years. . . .(timer noises). . . So, after that four years, your electricity is pretty much free. And those panels last like 24 to 25 years. Mahalo.

CHAIR RAWLINS-FERNANDEZ: Mahalo for your testimony. Members, any questions for our testifier? Seeing none. Thank you so much for your testimony today. Okay. The last testifier we have on our list is Zhantell Lindo. Anyone else wishing to testify, you may indicate so in the chat, or I will give a last call after Ms. Lindo.

MS. LINDO: Aloha, and mahalo for this opportunity. Thank you, Council and Chair. First of all, I am testifying--my name is Zhantell Lindo, I'm a community resident of Moloka'i

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testifying on my own behalf. I was privileged and honored to be a part of the community process with our CERAP program, and also sit among some of these wonderful young minds. And I think I just wanted to share a couple of areas that would be beneficial in different things that the Council is taking up and...and deliberating...deliberating over in different areas. First, the community process was successful because we were able to have leadership in our community, include our Councilmember and our Representative that was supportive of community-led action. And so, what they did was help to create and...and give opportunity to make sure that policies and initiatives supported what the community wanted, not helping the community to integrate their plans into what was already established. That was one of the biggest positive things. And it also allowed people to be experts of their own place, which...which is what I hear Lāhainā people...native people trying to say to everybody. And...what that...I think it's scary for government because there seems to be no control when we think we letting the natives make the decision. But I think what happens is there's actually more order, and more buy-in, and more respect for the whole process, when a community is given its opportunity to realize its strengths and its weaknesses, and then be able to direct those things to the proper places that collaborate and enhance what they want, and...and I think that our community has successfully found leadership that is not afraid to allow the community to lead. That's one. The second thing is I would like to be mindful that as much as I support all this alternative energy, there are serious scientific and other warnings and...and things that we have to watch out for. And...and it's not that we cannot use them, but, like, for instance, electric cars. Is our Fire Department ready and available with everything equipped that they need to take care of fires that stem from electric vehicles? And I think the answer is no, not on a wide scale, if an electric bus went on fire for instance. So, I think part of the other process that this Council can keep in mind is always asking the planners and Planning whether or not our emergency services has the capacity to deal with the new ideas we have, and not wait to be on the defense when something happens. It absolutely should be one part of our initial planning. And then last but not least, I am so honored to be a part of this Administration and this Council that is facing some of the most difficult decisions, and I have every, every confidence that you guys are fearless in the way that you allow this community to direct the policies that govern them. Because it's only when we can buy into those laws, and respect it, and...and...and feel like we can achieve those things for the betterment of our community that all the collaboration we doing going benefit everybody as a whole. But I really appreciate it, and I really mahalo Leilani, she's an up-and-coming superstar in our community, and it's awesome to always have Auntie Lori, and...and Keani, and Mahina, and everybody else--Matt Yamashita, I cannot really remember everybody, but I do know that our community has a host of...of beautiful people who have been given. But we only given that because there's leadership like you guys that are allowing us to take the lead on that on our island, and I...I pray for that for the rest of Maui County. Mahalo.

CHAIR RAWLINS-FERNANDEZ: Mahalo. I see a question from Committee Vice-Chair Paltin, Ms. Lindo. Committee Vice-Chair Paltin, go ahead.

VICE-CHAIR PALTIN: Did she run away? Okay. I just was wondering, based on what you was saying about the...how you were saying, like, we're ready to deal with the hazards of the

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panels or the batteries and things like that, is that part of the CERAP process too? Like the previous testifier said, the panels last for 20 or 30 years. Has that been built into your CERAP process that you participated in? What happened after the panels live out their lifespan?

MS. LINDO: I...I'm not sure. I...I'm pretty sure that if Aunty Lori was part of that plan, that decommissioning plan would be on there. I was specifically more involved in the emergency response part and...and services, but I will say that the reason I made that comment is because I happen to know that in certain types of renewable energy areas, there's not enough constant and, like, standard expectation of whether or not we asking ourselves before we say yes or no to one project if we have the capacity at present to handle the adverse consequences that may come from one really great idea. Not to stop the idea, but to make sure that we willing for support in every area, including emergency response.

VICE-CHAIR PALTIN: Okay. Thank you. I'll ask Ms. Buchanan when we pau testimony.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Committee Vice-Chair Paltin. Mahalo, Ms. Lindo. And we can follow up on those questions after we close public testimony. And it looks like we have one more person signed up. Mr. Tom Croly, you may proceed with your testimony.

MR. CROLY: Aloha, Committee. Aloha, Chair.

CHAIR RAWLINS-FERNANDEZ: Aloha. Aloha.

MR. CROLY: I tuned in late to...to this meeting, so I didn't get to see the entire presentation, but I was very impressed with what I saw, and I wanted to add something that maybe has...was...was already said, so I apologize if...if I'm being redundant here. But as everyone knows, I expect, Kaua'i has their own utility cooperative, it's owned by the people of Kaua'i, right? So, certainly, for many years, there have been people who have advocated that for Maui. And, of course, that's a difficult thing to get started, but I think there may be an opportunity here. If you're not aware, HECO has hired a...a bankruptcy specialist at a cost of over a million dollars, which seems that that's their...their card for, gee, if we're going to get sued, this is...this is the route we're going to go down. Well, at the end of that, there may be an opportunity for someone to assume MECO and...and...and take over this utility. So, I would like to see us getting ahead of that and being ready to be one of the bidders, or something like that, yeah, should...should that occur. I see a lot of forward thinking here, and I think that the people that...that I've just heard from probably know more...a lot more about this than I do, but if we could get that going, that would be...that...that would be terrific. So I hope that the Council will do what they can to facilitate potentially being in the right position a year from now, two years from now, three years from now when...when...when that opportunity may present itself. The other...the other two cents that I'll...I'll give is I got my solar 12 years ago, and what a great deal it was. As...as people said, gee, wow, my utility bill is down to nothing and...and so forth. But what I realized after I got it was I was one of the lucky few, right? I got in on the net metering system early, and then my

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neighbors who said, hey, Tom, you know, how's that working for you? They couldn't get in. And...and...and what I realize that should have been done maybe ahead of it was spreading the wealth. They should...MECO probably should have said to me, we're not going to let you offset 100 percent of your power needs that you've established, we're going to let you offset 50 percent so your neighbor can get a piece of this too. So, as we go down the road, that's one of the things that...that...that I hope is considered. I saw a lot of these third-party companies come...okay...come into the...the island and offer people, hey, we'll put solar panels on your roof for nothing, and you'll just pay us a lower amount. Well, in the end, those people who did that did not, you know, get the same deal that others did. So...so, certainly, we don't want to do that, we don't want to facilitate these third parties coming in and saying, hey, there's a lot of money to be made here . . . *(timer noises)* . . . and...and taking that away. So, I...I support the goals here. Thank you for the opportunity to...to...to chime in, And I hope that these opportunities are taken advantage of. Thanks.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Mr. Croly, for those...including those comments into the record. Those are important considerations. I see Committee Vice-Chair Paltin with a question.

VICE-CHAIR PALTIN: Thank you. Mr. Croly, I just wanted to make two clarifications of what you meant. When...I know that Kaua'i has their independent utility co-op, but the two clarifications I wanted to make is, is the County involved in that co-op? I'm not...I don't know the answer. And then, is it that you were saying that you wanted the County to be a buyer of...or a investor in MECO, or the community --

MR. CROLY: I...I...

VICE-CHAIR PALTIN: -- separate from the County?

MR. CROLY: I don't know the answer to the first question definitively, but i don't believe that the county is a party to that. However, the...the...the County and...and what you guys can do can help facilitate that happening, where the community becomes the co-op, right? I don't know exactly what powers you have, but...but...but I heard a lot of stuff today that said, gee, there is a lot of expertise here that could lead to this. So, that...that was my...my idea, not that the County of Maui becomes the utility provider, if you will.

VICE-CHAIR PALTIN: Okay. That was a little scary, if...and I didn't fully get it, but that's less scary.

MR. CROLY: . . . *(laughing)* . . .

VICE-CHAIR PALTIN: Thank you.

MR. CROLY: . . . *(laughing)* . . . Okay.

CHAIR RAWLINS-FERNANDEZ: Mahalo for that clarification, Committee Vice-Chair Paltin. And this Council has been supporting our co-op by --

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COUNCILMEMBER KAMA: Oh, absolutely.

CHAIR RAWLINS-FERNANDEZ: -- partnering with workforce development. Member Kama, your hand was up for a question?

COUNCILMEMBER KAMA: Yes. Thank you, Chair. I just wanted to respond to Member Paltin's question about KIUC. KIUC is on DHHL lands, and when I was on Kaua'i last weekend and I had an opportunity to tour all the Hawaiian Home Lands, that...what I was told was that the Anahola Homestead Association derives 40 percent of the revenues from KIUC, and the other 60 percent goes to DHHL. So, like, I think when the presenter said this morning that the homesteads could actually do this too...you know, find a homestead association, find the lands that are available next door to them, and duplicate something that they could get community benefits from. So, that's your answer, Member Paltin.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Member Kama. And Molokai has been working closely with our homesteaders as well. Okay. Any other questions for our testifier? Seeing none. Mahalo again, Mr. Croly, for those comments.

MR. CROLY: Aloha.

CHAIR RAWLINS-FERNANDEZ: Okay. At this time, I will ask if there is anyone out there wishing to testify. Mr. Law, I see you.

MR. LAW: Aloha, Councilmembers. Aloha, Chair Rawlins-Fernandez. Thank you for...oh, my name's Jasee Law from Kula Uka, Waiakoa ahupua'a. Thank you for bringing 'Ōlelo to the Council Chambers, it's music to my ears even though you didn't have a theme song. We'll work on that. Thank you for the previous speaker. I recommend that he comes back to Alice Lee's meeting tomorrow. And Auntie Alice, you might want to bring your golden lasso, so...Chair Fernandez, when I first met you in Wailuku, you were getting ready for your campaign event in your first election, and I asked you about the Molokai landfill, and you said there were other alternatives. Waste to energy is one of the alternatives that Mr. Sinenci's Committee was talking about before COVID hit, and before Mr. Stant went to the dark side. I'll try to send him the agenda in his prison cell. I think now would be a good time to consider building a trash-burner factory, either on Molokai, Hāna side, or at the current Pu'unēnē landfill. And even Lāhainā, we could burn all of the debris being removed and turn all of the microplastics into fertilizer and biochar for the 'āina. I yield the remainder of my time to the Hawaiians.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Mr. Law. Seeing no questions, I'll thank you for your testimony today. Okay. Anyone else wishing to testify? Okay. Hearing no one speaking up or writing in the chat their intention to testify, we're going to close public testimony. Oh, I'm sorry. Put the gavel down.

COUNCILMEMBERS: No objections.

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CHAIR RAWLINS-FERNANDEZ: ...*(laughing)*... Okay. Any objections to closing public testimony and accepting any written testimony into the record?

COUNCILMEMBERS: No objections.

. . . END PUBLIC TESTIMONY. . .

CHAIR RAWLINS-FERNANDEZ: Mahalo, Members. Okay. Okay. All right. I'm going to put three minutes on the clock for Members to ask questions of our resource personnel. And as a refresher, we have with us today...I think...oh yeah, Auntie Lori came back. Okay. We have Leilani Chow, Lori Buchanan, Jennifer Potter, Jennifer Yoshimura. We designated Mr. Sarter, and Mr. and Ms. Chan Hodges, to serve as resource personnel. And then I would also like to add Ali Andrews, who is CEO of Shake Energy Collaborative, one of the contractors for Ho'āhu Energy Co-op Molokai. Any objections? Okay, Members. We can start...well, we'll just...when...when you raise your hand, and then I'll put three minutes on the clock. Okay. Member Sinenci.

COUNCILMEMBER SINENCI: Thank you, Chair. Just for clarification, you're saying Molokai is a co-op currently?

CHAIR RAWLINS-FERNANDEZ: So, we have the Ho'āhu Energy Co-op.

COUNCILMEMBER SINENCI: So, just Ho'āhu is the co-op? Okay. Thanks.

CHAIR RAWLINS-FERNANDEZ: Yes. And then we have the President of the co-op, Lori Buchanan, if you'd like to ask her a question.

COUNCILMEMBER SINENCI: Yes. Aloha and mahalo, Auntie Lori. As a co-op, are there...and we did have that quick discussion with Mr. Croly about Kaua'i co-op. Are there any benefits that you see, or some of the challenges when moving forward as a cooperative?

MS. BUCHANAN: Well, that's a loaded question. ...*(laughing)*... Well, we chose to go that way because obviously, we wanted the beneficiaries to be the people of Molokai, the community. So, the whole structure is, you know, so different from the capitalism type of structure, and who benefits...it's not a for...it's not a publicly traded co-op. So, you know, that...therein lies the really basic difference, is that we really wanted the community to be the beneficiaries of any profits that might occur as the savings of costs for renewable energy that would go back to, of course, running the co-op, but also to the shareholders of that co-op, which would be the community. Thank you.

COUNCILMEMBER SINENCI: So, follow up, do...are you able to apply for rural...Federal rural funding, or can you also...can the co-op also take not further investments, but maybe, like...like almost a stocks into your cooperative?

MS. BUCHANAN: Short answer, yes.

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COUNCILMEMBER SINENCI: Thank you very much. Thank you, Chair.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Member Sinenci. Mr. Sarter, are you trying to speak?

MR. SARTER: Oh, I'm sorry, I didn't have myself muted.

CHAIR RAWLINS-FERNANDEZ: Oh, okay.

MR. SARTER: But no, I'm up for...open for questions if anybody has anything about bidirectional EV technology. Thanks.

CHAIR RAWLINS-FERNANDEZ: Mahalo. Would any of our other personnel resource people like to add while Member Sinenci has 30 more seconds left to his questions that he asked? . . .*(laughing)*. . . Okay. I saw Committee Vice-Chair Paltin with her hand up, followed by Member Sugimura.

VICE-CHAIR PALTIN: Thank you. I guess...I don't know, my question is a little...maybe a little trauma question. Like, if for...for your co-op...I don't know if you have wires. When I was on Kaua'i, I know it's a...a utility co-op, and I've seen a lot of the wire as we're driving, it looked like on wooden poles as well. And I don't know if you guys have wires, and if...if they was windy, or the poles if you have poles, and the transmission lines spark the fire, what would happen, or how do you decommission the panels, have you guys planned for that because all those questions I had?

MS. BUCHANAN: Thank you. And Chair Rawlins-Fernandez, if it's okay, I'm going to ask also for our experts on this panel to...to jump in because, you know, it's dependent on the type of project you have, but I'm going to ask Ali and the Jennifers if they want to join in answering that question.

CHAIR RAWLINS-FERNANDEZ: Absolutely.

VICE-CHAIR PALTIN: Like, would...like, I guess the question is, like, would we sue...like, if we were a co-op community, co-op electricity, and then our town burned down, would we sue ourselves or something like that a little bit, or would...would...could that happen? Like, whatever the utility is sparks something, and then the town burns down? Because I mean, I...I'm not saying the MECO is a bad guy. Plenty folks that work for MECO are our community members that lost houses too.

CHAIR RAWLINS-FERNANDEZ: I think...so, what...what I heard from your question, Committee Vice-Chair Paltin, is who are the decision makers on whether we have transmission lines, and where they're located, and whether they're buried, or do we explore other ideas such as microgrids that were presented? Also, you know, where do profits go? Do they just go to shareholders--because HECO is a shareholder-owned corporation--or do they reinvest it in our infrastructure so that they are keeping our community safe? Either Ms. Yoshimura or Ms. Potter would like to chime in?

MS. YOSHIMURA: . . .*(inaudible)*. . .

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VICE-CHAIR PALTIN: And I don't really understand microgrids if they have lines.

MS. YOSHIMURA: Yeah, so I think I can share it at a...at a high level a little bit. It...it really depends on the type of...of microgrid, if it's interconnected. Also if it's a co-op, right? It...there's, I think, decisions that the community can make, if you want lines depending on generation, whether it's renewables, hydro. I think there was someone else that testified earlier around different types of...of plants that can be...landfill and whatnot that can be transitioning energy to meet residential and...and commercial customers. So, oftentimes, you do need wires per se, right, but I think there is an opportunity for Maui to think about reducing the distance from generation to your loads, and then that reduces the length of the wires and infrastructure. So, when we kind of broad, broad-brush terminology and microgrids can be interconnected to the grid. So the existing system with MECO and HECO, you have those lines, transmission and distribution, and at the same time, you can look at non...nonwired solutions as well, right? You can look at underground solutions. I think John Sarter mentioned a little bit around the...the EV pieces. And so, there's a lot of different technology and emerging technology that the community can think about, and it doesn't have to be the traditional planning cycles. And I...I didn't share a couple of the slides because I was running out of time, but there's an opportunity to engage with the community, the industry, and leaders to have iterative processes, and I think Sust'ainable Molokai and Ho'āhu have...have done this in amazingly...a job of iterative community feedback. And, you know, what do the, from a regional to small scale, community solutions look like? So, all that to say is, you know, there is the transmission-scale lines that, you know, our current grid is looking at that addresses a lot of technical concerns, and, like, voltage drops that we see, and...and why we have those big...big lines. But again, I...I...there's a lot of opportunities to reframe and rethink about what energy systems can look like right now within the community. And then I'll...I'll pause and turn it over to...to Jenny Potter.

MS. POTTER: All right. Thank you. And Jennifer, that was a great explanation. Appreciate that. So...so, just to pick up on the...the who makes the decision around the transmission lines and the distribution lines and...and to respond to that question. So, the utility is...for every application that they put forth in front of the PUC, they're required to...in particular, on the infrastructure upgrade, they're required to request whether it should be underground, or it should be overhead. And so, the PUC typically evaluates that, looks at the case that the...the companies have made, and determines, you know, whether the line should be buried or not. Typically, the cost to bury the lines is three to four times more than to have it overhead, and typically no one wants to...to take on that additional cost. So, the PUC it actually required to evaluate whether the company should underground the lines for each and every infrastructure upgrade that they have. So, the PUC is actually kind of the decision-maker there. Now, if the companies decide that they want to underground all of the lines on the West Side, including transmission and distribution lines, they will have to submit a separate application to the PUC asking for cost recovery for that initiative. And so, that...that would be something that would be borne by all of the ratepayers in Maui, and so that...that would be, you know, a cost that is...is pretty prohibitive. In terms of, like, the microgrid and thinking about, you know, what Jennifer was speaking to, the

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microgrids in West Maui could...could be islanded, so, you know, where they actually are taken off the grid and they're not interconnected. One reason to keep them interconnected is to have a constant backup power supply from the utility, but that is not a necessity. In particular, since we've come up, our technologies are so much more sophisticated now, that we can actually have generation...customer-sited generation and then community solar that...that can actually support an entire community. We don't need to actually interconnect to the larger grid. So this...these are all options that we can consider, so I'll stop there.

CHAIR RAWLINS-FERNANDEZ: All right. And I'll call on Mr. Sarter to provide his additional comments, and then Ms. Andrews.

MR. SARTER: Thank you. Yes, Jennie, absolutely. I mean, this very thing is happening in California right now. They're spending billions of dollars to underground lines when really, there are much more affordable solutions, such as distributed solar and storage capabilities. And particularly with electric vehicle bidirectional EV technology, there's already a number of EVs that are bidirectional capable. My company is partnered with Volvo and Nissan, for instance, and you can buy a battery on wheels, an EV, much less expensively than you can buy a stationary battery per kilowatt-hour. So, this is a technology that's ready. The standards and codes are done. The fire safety standards are essentially the same as a stationary battery, it's just a battery on wheels. And this there's a tremendous way to be able to avert a lot of the costs of additional undergrounding and...and infrastructure...and really, infrastructure of the grid as a whole. The more EVs you have, you create the ability for these electric vehicles to push power out, support the grid, and you can eliminate fossil fuel peaker plants. That's...that's it from me.

CHAIR RAWLINS-FERNANDEZ: Mahalo. Ms. Andrews?

MS. ANDREWS: Thank you. And I...sorry, I put something in the chat, not realizing I wasn't supposed to put something in the chat. But I would just echo what the Jennifers have said before, and maybe reiterating one thing, which is that Ho'āhu at the moment is a co-op that owns two solar and battery storage projects, not the grids that bring that...those...that electricity to homes. So, right now, Ho'āhu doesn't make those decisions, but if a...if a cooperative were to manage the distribution and transmission lines, then they would get to assess those risks-cost balances in the same way that Ho'āhu balanced the decision around what type of batteries to select for their battery storage system that goes with their community solar project. They recognize that that was an area where risk was being introduced into the project because some batteries are more flammable than other batteries, and they spent about three months assessing different options, including cost and...and chemistry technology, and ended up selecting the one that best matched their values. And I would guess that if a cooperative on the grid, that would be similar decision-making procedure. Thanks.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Ms. Andrews. Okay. Next is Member Sugimura.

COUNCILMEMBER SUGIMURA: Thank you. So, I'm interested in Mr. Sar--...is it Starter or

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Sarter? Sarter. Sarter. And in terms of electric vehicle, because there's such a big movement nationally to convert towards electric vehicles, we see it on, you know, all of the different car companies. But you're saying that is an alternative that...your product that you have, or you have invented something? I don't...

MR. SARTER: Well, it's a company...it's a company that I started working for. I...I'm a...a designer-builder in sustainable development for my entire career, and I've put my...my company on hold, basically, to help this company launch because the technology has so much potential. You know, when you start to have all of these electric vehicles, it's a huge energy asset in which each of them being able to power a home for multiple days and...and being able to charge fully from solar, it's really a way to decarbonize the built environment, the transportation, and the energy sector all at one time simultaneously. And like in California, we're going to have 12.5 million EVs they say by...by 2035. If they are --

COUNCILMEMBER SUGIMURA: Is there something that...go ahead.

MR. SARTER: Well, I was just going to say, if those EVs are bidirectional, that's almost 2,000 times the size of the largest grid scale energy storage in existence today. And it's widely distributed where you need the power, at homes and businesses.

COUNCILMEMBER SUGIMURA: So, is it something that's doable in Hawai'i, or is it--and through the car companies?

MR. SARTER: So...

COUNCILMEMBER SUGIMURA: Or...or your company you're working for?

MR. SARTER: Yes. We've partnered with Volvo and Nissan, and like I said, we're able to support any electric vehicle company that will work with us, that wants to, that wishes to. And it's...we've seen all of the major companies really going this direction. The problem is a lot of them are trying to keep it a proprietary solution that they can just offer on their highest-end vehicles, right? So, the effort I've been making in California where I live part-time also is really to get an interoperable platform, and get this into the mainstream so every electric vehicle becomes bidirectional. It's...it's not a big extra expense for the companies to do so. And...

COUNCILMEMBER SUGIMURA: That's a great idea, right?

MR. SARTER: Yeah.

COUNCILMEMBER SUGIMURA: We see more and more of that, and...and with the...with the car companies doing conversions, it is something that I think should be, like, an option is when you go and buy your car, maybe that's another accessory. That's why I was wondering if it's available here in Hawai'i, that can be an option.

MR. SARTER: It is. Yes, it is. Our initial launch territory is California, New York, and the UK.

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But Hawai'i is on the second-tier list, so within about two years, we expect to be able to deliver...deliver product here at Hawai'i, which is...will coincide with the timeline of rebuilding, hopefully.

COUNCILMEMBER SUGIMURA: That's fabulous. . . .*(inaudible)*. . . can have a...who have electric vehicles then can do something with your equipment and recharge your home, is that how it works at night?

MR. SARTER: Yes, you could charge your vehicle with solar during the day ideally, but you can also charge it from the grid anywhere. And then you bring your vehicle home, you power your house during peak times of use. You can export power to the grid so you can actually monetize your vehicle while sitting there, you're going to get paid for grid-support services. And really, it enables the...lowers the cost of ownership for EVs, it's really...it's amazing technology, and I'm so excited to be a part of it. And I'm actually planning to rebuild my home in Lāhainā using the technology in a Nissan Leaf, and...and that's all the power I need to rebuild the entire house.

COUNCILMEMBER SUGIMURA: Wow. . . .*(inaudible)*. . . So, what is the product called?

MR. SARTER: It's...the company is --

CHAIR RAWLINS-FERNANDEZ: Member Sugimura, your time is up.

COUNCILMEMBER SUGIMURA: Oh, time is up. Sorry.

CHAIR RAWLINS-FERNANDEZ: You...you can...

MR. SARTER: Oh.

COUNCILMEMBER SUGIMURA: Sorry.

CHAIR RAWLINS-FERNANDEZ: Mr. Sarter, you can...you can answer Member Sugimura's question. I'm...I'm excited to see you so excited about this. And I also saw Mr. Chan Hodges turn his video on, I'm assuming that he would like to also add something. Mr. Sarter, please complete your comments, and then I'll invite Mr. Chan Hodges to provide additional comments.

MR. SARTER: Okay. I'll put the...the company name and the link in the chat. Can I put it in the general chat, is that alright? Okay. Great. And...and by all means, reach out to me, I'll put my email in there as well, and if anybody has any more questions, then absolutely reach out. This is...this is something the whole world needs, really, so...

COUNCILMEMBER SUGIMURA: Yeah. Thank you.

MR. SARTER: Yeah. Yeah. Thank you.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Mr. Sarter. Mr. Chan Hodges.

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MR. CHAN HODGES: Oh, thank you, Chair. I was just going to add to what Mr. Sarter said. Shay and I...that whole technology, the...the bidirectional charging, vehicle-to-grid technology is...is one of the things that we're really looking at. And Shay, actually...in...in a week, we'll be going to California to meet with some groups that are doing that in California, and there's a group called the Vehicle-to-Grid Integration Council that I believe Mr. Sarter's company is also a member of that we just got an email from them just while this Council Meeting was going on. All we're going to do is sort of connect with the people there. So, that's...that's kind of one of the pieces we're going to be doing is looking at this, because I do 100 percent agree with what Mr. Sarter is saying about the potential for this. Thank you.

CHAIR RAWLINS-FERNANDEZ: Mahalo.

MR. SARTER: Thanks. Yes, we are involved with the VGI working group, yeah.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Mr. Chan Hodges. Okay. And Mr. Sarter did share his information in the chat, and that's www.dcbel.energy, and his email address is sarterfish@gmail.com, john.sarter@dcbel.energy. Okay. Members, any other questions? We'll go...I'll see if anyone else has a round one before I call on our Members for round two. Member Kama, did you want to elaborate more on what you were talking about during public testimony?

COUNCILMEMBER KAMA: Oh, no. What I...no. What I wanted to ask was from...I'm looking at the slide that has the 2,800-plus conversations with Molokai community members, the 713 surveys collected, and the 30-plus focus groups or workshops that they had, and the 17 community events. So, I wanted to talk to whoever put this slide together, or whoever did this --

CHAIR RAWLINS-FERNANDEZ: Ms. Chow.

COUNCILMEMBER KAMA: Who did that?

CHAIR RAWLINS-FERNANDEZ: Ms. Chow.

COUNCILMEMBER KAMA: Ms. Chow. So...

CHAIR RAWLINS-FERNANDEZ: Ms. Chow, are you listening to Member Kama's question? Okay. Go ahead and ask her the question regarding the slide--or community outreach.

COUNCILMEMBER KAMA: So, I wanted to ask, how long did it take for you all to do all of this? To do the conversations, the surveys, and the focus groups, and then have all of your community events? What was that timeline like, and how many people were --

MS. CHOW: All of the...

COUNCILMEMBER KAMA: -- involved in doing that?

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MS. CHOW: Yeah, yeah. That's a good question. So, these engagement stats were collected from throughout the process, so a little --

COUNCILMEMBER KAMA: Yes.

MS. CHOW: -- over a year and a half. It was important that we kept tagging community in throughout the process to make sure, like, A, we're on track, and this is...the community is editing it in real time as we're going. And so, we did our best to make use of...of community's time, and being really conscious of community fatigue and having to attend multiple meetings, and so we did a lot of, like, attending those 17 different community events where people were already going to be at, going to different homestead association meetings, standing committee meetings, and so that's why we were able to reach and actually get qualitative and quantitative info from...from a lot of members of our community. And the bulk of the, like, physical logistics part of that did come from the Sust'ainable Molokai team and the Molokai community members in the Molokai Clean Energy Hui, who are all volunteer. They showed up to every single one of our events and helped to facilitate these discussions in the community so that everybody had time to ask their questions that was on the top of their mind. And also, our technical team attended all of these events as well, and were there as a resource in case, you know, there were some super technical questions that we weren't able to answer. Yeah.

COUNCILMEMBER KAMA: So, my next questions is, so I was trying to read the 153 pages, Chair, that you put in the Granicus, and I didn't get...only got halfway. But my question is, when I look at it, it's almost like a road map for others to follow. It looks like that to me. So, because Molokai...to me, I think Molokai is different from...from Maui and other islands in terms of the cohesiveness of your community, and in terms of how the community is like-minded. And on...in this community, in Maui, we are not always like-minded. We try to be, but we...that we...but we aren't, and that's just the reality of it all. So, when you do something like this, and you want to duplicate that in maybe one of our districts . . . *(timer sounds)* . . . could...could this actually occur on a wide-scale Maui, or could it actually...or would it probably work better on a smaller scale, going district to district, or community to community, or homestead to homestead?

MS. CHOW: Yeah, we definitely play to our strengths on Molokai. We have excellent community organizers here, which led to the success of being able to incorporate so much community mana'o in this plan. I...I know it is going to be different everywhere else, every community is a little bit different. But the key piece for this community-led planning was that there were community leaders leading it, you know? The community organizations that helped throughout CERAP were essential to reaching the people that we needed to reach, who usually get missed by planning processes. They know exactly where...where they are, they know exactly how to call the--a lot of the invites were personal invites to come to these meetings--and so, we were able to reach everybody that we needed to. Molokai is relatively small compared to certain Maui communities and...and the rest of Hawai'i, but it's not impossible if you have the community leadership team in place.

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COUNCILMEMBER KAMA: Thank you. Thank you, Chair.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Member Kama. Okay. I will ask my questions, and then we can go to round two. Okay. Let's see. And Member Kama, thank you for starting to ask one of the questions that I wanted Ms. Chow to speak to. So, we all know that the County filed a lawsuit against HECO, and as we heard from Mr. Croly's testimony, HECO is, you know, preparing for bankruptcy. And we know that's what happened in the Paradise fires with PG&E, that after the \$10 billion settlement, you know, they also filed for bankruptcy. And...and, you know, it's important for us to be forward-looking to understand, you know, what the implications are and be prepared for it. HECO is shareholder owned, and like Ms. Buchanan spoke to, the intention with our Molokai co-op was for it to be community owned, for it to be customer owned so that the decision-making is at home. Those that are directly impacted by those decisions are the ones that are making the decisions, and not people who are...who don't even live here. We are done with corporations seeking to extract profits from our communities. You know, undergrounding the lines is...is not ideal, I'm sorry, it's crumbs. We...we...you know, burying the lines, perhaps, was a good idea 20 years ago, perhaps it could have, you know, prevented that disaster. But here we are now, and the entire community of Lāhainā is gone. And as I stated earlier, we...we owe it to the lives that were lost and everything to do better. We must demand more. And so, I have two questions. One is regarding money. So, there...there...there was some discussion of it in each of the presentations. You know, there was the announcement of the 95 million to HECO. And...so, there's a lot of funding going to...you know, supporting corporations and, you know, not so much...well, at least before, we're seeing a...a helpful transition to it now in, like, possibly decentralizing, and using technology that is safer for our community and not so impactful to our environment. You know, we heard also ideas from Mr. Law regarding waste-to-energy, which is something that we have been exploring. We also have biofuel crops as firm energy in addition to the solar and hydro. And...and so, I was hoping that our presenters could speak to opportunities for funding these projects, anything that wasn't included in the presentation, and then also, any additional recommendations that our presenters would like to share . . . (timer noises). . . on community outreach and involvement.

MR. SARTER: If I may, I thought stated I was --

CHAIR RAWLINS-FERNANDEZ: Mr. Sarter, I'm going to call on Ms. Chow first, and then I will call on you after.

MS. CHOW: So, to do the planning piece, the community, through Sust'ainable Molokai, had to raise all of the funding to fund our community engagement process design. Super heavy lift, we're really thankful to everybody who contributed to help us out. And on the technical side, HNEI provided all of their technical assistance in kind, which would have been another huge hurdle for our community if they had not done that. And the reason why we went with HNEI was because we wanted, you know, non-HECO, technology-neutral expertise that the community felt comfortable doing this process with. For CERAP-2, we were able to take our CERAP-1 portfolio, and our energy goals, and our...and our very clear values and outcomes for the future that we want for our

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island and apply for Department of Energy programs, such as ETIPP and C2C. And there are a bunch of different programs from the Department of Energy that provide just the technical assistance like ETIPP, or technical assistance and funding like C2C. And there's shorter ones where you can get, like, just six months of technical assistance, and there's longer ones like C2C that are three years and come with technical assistance from designing the projects all the way to being implementation ready. And so, we're still figuring out, like, the...the financial pieces of where to get this kind of support. Ideally, in the future, you know, our policies and processes would have ongoing support like this for communities for the financial and technical assistance they need. Other than that, still...still making our way up the learning curve on...on where to get the support that communities need, and we'll continue to keep you all updated as we learn more.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Ms. Chow. Mr. Sarter, and then I'll call on Ms. Yoshimura.

MR. SARTER: Thank you. And obviously, Ms. Chow has far more experience in...in the funding end of things. But what I...what I tried to emphasize when I spoke at first is that the prewiring for these technologies is...is really the most important first step, that way you're future-proofing of your buildings, you know? And if there was a way to get that prewiring into code, or even conduits maybe so you can pull the wires in later, that would save thousands of dollars later on when...when somebody wants to install the technology. The other thing about our particular product is that it...it's the same cost as a comparable solar inverter of the same size. So, it...it makes it affordable. And then there is also a company called Fermata that is piloting a program in Boston currently, that they're offering \$100 a month leases for a Nissan Leaf in order for...in exchange for participation by the owners of those vehicles, or the lessors, to participate in grid services. So, it really makes it affordable. They're taking the money that you would normally save over time, and they're giving it at a...at a dramatic discount. So, \$100 a month is less than almost anybody spends in gasoline.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Mr. Sarter. Ms. Yoshimura, and...and...and I'm hoping you also include some of that...that equity piece that was...yes. Okay. Go ahead.

MS. YOSHIMURA: Oh, yeah, we'll...we'll definitely try to...try to touch on that, Chair. So, in regarding the funding, mahalo, Leilani, for mentioning the community TA programs that DOE funds. You know, we had Energy Storage for Social Equity. There is C2C, Communities to Clean Energy. ETIPP is focused on rural, remote, and islanded communities. So, I think, you know, my...my perspective being at the Lab and seeing the Department of Energy funding a lot of opportunities for states, utilities, communities, different demographics, their...the recommendation is to try to bridge the different funding mechanisms. So, we have different offices, like the Grid Deployment Office, that is funding states, tribes, and territories through 40101(d). That does not necessarily...unfortunately, it excludes Native Hawaiians and Kānaka Maoli, but funding has gone through the State, right? And so, it's understanding the past ways to apply for those funds that can be utilized for community resilience and rebuilding. For energy, there is EPA grants. There's USDA grants, that looks at agriculture, solar,

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environmental. So, it does take in recognizing it's...we don't make it easy from the government side, and...and trying to create that transparency and continuity of funding for communities in...in situations like this. But there is opportunities to bridge these funding mechanisms that address the grid, that address the community, that address resilience, or climate change, or ecology...like ecological solutions. You know, Lāhainā...recognizing the history, and the capitol, and the vibrancy of...of Lāhainā being the capitol, you know, there's an opportunity to rethink and reimagine what our previous ancestors have done from the ahapua'as, right, and...and reimagining what that can look like in conjunction with energy solutions that tie into food security, transportation, housing, and education. And so, there is even the Building Technologies Office for K through 12 schools. A lot of grants for education, there's the new SCEP office, it's the State Community Energy Programs office, that has a lot of funding and mechanisms for energy efficiency programs and community programs as well. So, all that to say is happy to...to connect with folks interested offline and see where we can support and kind of bridge the different pathways from the Department of Energy.

CHAIR RAWLINS-FERNANDEZ: Awesome. Mahalo. Anyone else wanted to jump on the next question? Okay. Oh, Ms. Buchanan?

MS. BUCHANAN: Ali...I mean, Keani, Auntie Lori here. I wanted really, really briefly, maybe Ali wanted to respond because I really simply, how did Ho'āhu Energy Cooperative even be in the running to put in a bid on a community-based renewable energy project. That...you're looking at grassroots people with no money, potentially on a project where you got to come up with \$20 million on one island like Molokai. And when you tell people it's \$20 million, that's...that's how it hits you, like, what? Your project is a \$20 million project? Yes, it is. How did you come up with the money? Well, I tell you what, wasn't easy, but we did it. So, I don't know if...if you want to go more into how that actually came about, we can tell you, and Ali can tell you because it was through a lot of hard work, but we made it happen, so I know it...it can be done. And that's the hope that we can share, that we've done it, it can be done, there's money out there, and you can get it. Thank you.

CHAIR RAWLINS-FERNANDEZ: Mahalo. Ms. Andrews, did you want to share?

MS. ANDREWS: Absolutely. I would just say that there are different pools of money available, depending on if you're thinking about community-led planning versus community-led development. I think both pools definitely exist, as we have found, and as Auntie Lori said, they are not necessarily easy to find. However, there are a lot of people out there that are inspired by the...the sweat equity that the community puts into these projects. And so, that was...some examples that I can quickly share is there's the People's Solar Energy Fund, which funds community-led, community-owned solar projects. There are similar other technical assistance funds out there. Clean energy group funds, early-stage technical assistance for a more development side, like, you know what you want to build, and you need the money to go start hiring the engineers, applying for the permits, paying for interconnection studies, et cetera. It is sometimes challenging to raise the...the full \$20 million when you have \$0 in the bank account to start with, but there are a lot of people who recognize that that's a systemic inequity, and so

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shifting...shifting money, shifting debt, changing the rules around, who lends to whom, and recognition that the project, in the end, is going to break that cycle of people with money get to have \$20 million projects than people who don't, don't. So, there are lots of creative things out there, but it is challenging...but doable.

CHAIR RAWLINS-FERNANDEZ: Mahalo. Absolutely doable. Mahalo, Ms. Andrews. And this first project that you folks are working on and speaking to, one of the testifiers talking about those who got in on the renewable energy before others did, that this project was intended to the community renewable...CBRE...Community-Based Renewable Energy Project Shared Solar was intended to target those that are renting, so they don't own their own homes, and those that are low- to moderate-income, so that they too can share in the...the savings of renewable energy. Ms. Chow, I saw you turn...turn your video on, did you have additional comments?

MS. CHOW: I wasn't planning on it, but I did have one additional thought. Because the community put so much work into clarifying and articulating what we want for our future, both in CERAP, but also Ho'āhu guys did an amazing job at codesigning their projects with the community. That did give funders and different opportunities a lot of confidence to select Molokai to receive these rewards because we had so much community support, because these projects were community-led and community-designed. And so, that does play a big role into how ready you are to be able to take advantage of all of the financial opportunities that are available currently. Mahalo.

CHAIR RAWLINS-FERNANDEZ: Awesome point. And mahalo for sharing your intellectual property on the website for the communities to use as a guide for those that want to, you know, follow in the footsteps of the work that the community has done on Molokai. Okay. It's 12:02. I did see Member Sinenci and Member Paltin with their hands up earlier. Were they quick questions? Members, do you have any objections to allowing them to ask their last questions?

COUNCILMEMBER SINENCI: Chair, my...my question was answered. Thank you.

CHAIR RAWLINS-FERNANDEZ: Oh, okay. Great. Member Paltin? Oh, okay. And Member Kama?

VICE-CHAIR PALTIN: I don't think my question is quick.

CHAIR RAWLINS-FERNANDEZ: Member Kama has a quick one.

COUNCILMEMBER KAMA: Okay. So, if I wanted to do a co-op on a Hawaiian Homestead here, who's the first person I would call? Who do I call to ask for help?

MS. BUCHANAN: Aunty Lori. . . .*(laughing)*. . .

COUNCILMEMBER KAMA: That's what I heard. Okay. Thank you. See, quick.

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CHAIR RAWLINS-FERNANDEZ: That was quick, you weren't lying. Member Paltin, do you want to, like, just pose your question, and then...and then, you know, our resource persons could...you know, perhaps, we can...you know, they can talk story with you offline, and then...this isn't the end.

VICE-CHAIR PALTIN: I just was...sure. I just was wondering, like, as a co-op, is there concern about liability after what happened to Maui, or...I've seen that HECO still has the transmission and distribution lines, so then would that liability still be on HECO? But what if you wanted to do it all yourself, without a HECO, and then, like, do you need liability insurance? I mean, obviously, nobody wants their whole town to burn down, and the people that are serving it and having corporate profit because--now look, I mean...but I mean, I guess, is there that concern, and how would you...I guess mitigate it by trying to make better choices, but...and I'm not trying to say HECO didn't try to make better choices, but I guess that's my concern...question.

MS. BUCHANAN: Thank you Councilwoman Paltin. I want to add to that, because therein lies the beauty of...of how we started. The reason we started was we put the environment before anything else. So, the whole look, and perspective, and philosophy of looking at energy and energy systems for Molokai was that number one, it would not harm the environment. And safety and the environment would be placed above the actual implementation of the systems because we all know, in the end, the way to really mitigate this energy stuff is just to use less, right? Not make it cheaper so you going eat more, right? Cheap food, you going eat more. And then also, to...to make sure that you are not killing the very same that you need to survive on, which is your natural resources. And so, that's the...the...the test, yeah? So, for Ho'āhu, we have a...we have...we have tests. Like, already, we know that, oh, this is not going to fly, you know, no way. And heavy vetting that goes on, and always...even incorporating the eight rounds of decision-making by the Aha Moku. From a culture perspective, that's what I bring to the table in our planning process for...for energy systems is, does it pass the test, you know? And we all know that we have to give too, right? We cannot just...we have to come to a middle ground, but the least, least amount of impact that we can do, that's how we go on. And that's why are we spent so much time on battery decisions. Where is it made? Oh, is it made in China, or is it made in America? I mean, really anal stuff like that that probably other guys, big companies would look at us and...you know, like wasted time. But it matters to us, yeah? It matters to my community, it matters to me and my neighbors because we got to protect ourselves, we got to protect our environment. So, thank you for the great question. I appreciate it.

VICE-CHAIR PALTIN: And then when you have your batteries now, you got to make, like, fire break and like that around them and like that, right?

MS. BUCHANAN: Yeah. And...and we spent a lot of time talking about battery--battery storage, battery fires, mitigating battery--even the U.S. earlier decommissioning. Decommissioning is my pet peeve. Like, I'm not even going to talk about one project unless you tell me how you going take 'em doing after, at the end. Like, we not going to even start down that road unless you tell me how you going remove that at the end. So, that's what community-led planning looks like. It starts from there, not, oh, here's one

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project, I'm going shove 'em down your throat, and then later on, if you no like it, you going throw up, and then we going come back. No. It start from the beginning of what your community wants, and then you go from there, you know? What is acceptable, what is not, here the line in the sand, no waste time. So, yeah. So, we...it matters, And believe me, we've thought about it a lot, and it's in our planning.

VICE-CHAIR PALTIN: Thank you.

MS. BUCHANAN: Thank you for the question.

CHAIR RAWLINS-FERNANDEZ: Mahalo, Ms. Buchanan. Mahalo, Member Paltin. In addition to the...the end side of, you know, planning, decommissioning, they also...the co-op also spent a lot of time talking about sourcing so that we are not shifting environmental burdens on to other communities that have historically shouldered a lot of the burdens of the higher-consuming countries. Okay. It's 12:08. Mahalo, everyone, for going a little over 12:00 p.m. Anything before we adjourn? Any comments, any...anything else? Okay. Hearing no one speaking up, and again, I...I look forward to further discussion on this, because this is long game. And I want to thank all of our presenters so much for your time and your mana today, especially Ms. Potter, while you're not feeling super well, and Ms. Chow, as you're preparing for a super well-earned...some time off. So, mahalo to everyone for juggling all that you do and for giving back to communities so much. Appreciate you all. Okay. Members, it's 12:09, and the...oh, let me check with Staff. Okay. We're going to defer this item. Any objections?

COUNCILMEMBERS: No objections.

COUNCILMEMBERS VOICED NO OBJECTIONS (excused: TC).

ACTION: DEFER pending further discussion.

CHAIR RAWLINS-FERNANDEZ: Okay. Item has been deferred. Anything else, Staff? I love that I have an all-wāhine Committee Staff team. Yeah. Okay. It's 12:09 on October 5th, and the ESCS Committee is now adjourned. . . .(gavel). . .

ADJOURN: 12:09 p.m.

APPROVED:



KEANI N.W. RAWLINS-FERNANDEZ, Chair
Efficiency Solutions and Circular Systems
Committee

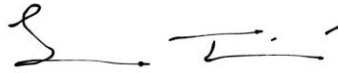
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CERTIFICATION

I, Logan Tsuji, hereby certify that pages 1 through 46 of 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 1st day of November 2023, in Wailuku, Hawai'i

A handwritten signature in black ink, appearing to read 'Logan Tsuji', is written above a horizontal line.

Logan Tsuji